

No. 14-1564, -1705

UNITED STATES COURT OF APPEALS FOR THE FEDERAL CIRCUIT

ALEXSAM, INC.,

Plaintiff-Cross-Appellant,

v.

THE GAP, INC. AND DIRECT CONSUMER SERVICES, LLC,

Defendants-Appellants.

Appeal from the United States District Court for the Eastern District of Texas in
Case No. 2:13-CV-0004, Judge Michael H. Schneider

**BRIEF FOR DEFENDANTS-APPELLANTS
THE GAP, INC. AND DIRECT CONSUMER SERVICES, LLC**

Alan M. Fisch
R. William Sigler
Jeffrey M. Saltman
FISCH SIGLER LLP
5335 Wisconsin Avenue, NW
Eighth Floor
Washington, DC 20015
Tel: (202) 362-3500

*Attorneys for Defendants-Appellants
The Gap, Inc. and Direct Consumer
Services, LLC*

September 12, 2014

Peter Scoolidge
FISCH SIGLER LLP
432 Park Avenue South,
Fourth Floor
New York, NY 10016
Tel: (212) 235-0440

CERTIFICATE OF INTEREST

Counsel for Defendants-Appellants The Gap, Inc. and Direct Consumer Services LLC certifies:

1. The full name of every party or *amicus* represented by me is:

The Gap, Inc. and Direct Consumer Services, LLC

2. The name of the real party in interest (if the party named in the caption is not the real party in interest) represented by me is:

Not Applicable

3. All parent corporations and any publicly held companies that own 10 percent or more of the stock of the parties or *amicus* represented by me are:

None

4. The names of all law firms and partners or associates that appeared for the party or *amicus* now represented by me in the trial court or agency or are expected to appear in this court are:

Fisch Sigler LLP: Alan M. Fisch, R. William Sigler, Jeffrey Saltman, David Saunders, Silvia Jordan, Peter Scoolidge, and Jason F. Hoffman.

Siebman, Burg, Phillips & Smith LLP: Michael Smith.

Date: September 12, 2014

/s/ Alan M. Fisch

Alan M. Fisch

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USE OF EMPHASIS IN QUOTATIONS

All emphasis in quotations and record citations has been added, unless otherwise indicated.

USE OF SCHEMATIC DIAGRAMS AND SCREENSHOTS

Gap has provided illustrative diagrams and screenshots to assist the Court in understanding the technical and legal issues disputed by the parties below and on appeal.

STATEMENT OF RELATED CASES

Appellants The Gap Inc. and Direct Consumer Services, LLC (“Gap”) are not aware of any pending related cases. Gap is aware of three completed cases involving the patents-in-suit, United States Patent Nos. 6,000,608 (“the ’608 patent”) and 6,189,787 (“the ’787 patent), that are potentially relevant to this appeal: (1) *Alexsam, Inc. v. IDT Corp.*, 715 F.3d 1336 (Fed. Cir. 2013), which involved a different accused infringer and different invalidity issues; (2) *Alexsam, Inc. v. Pier 1 Imports, Inc.*, 540 Fed. Appx. 994 (Fed. Cir. Nov. 7, 2013) (per curiam) (Rule 36 affirmation), which resulted in a noninfringement judgment for another customer of Gap’s gift card processor, Ceridian Stored Value Solutions, Inc. (“SVS”); and (3) *Alexsam, Inc. v. Barnes & Noble, Inc. et al.*, 2:13-cv-0003-MHS-CMC, which resulted in a noninfringement judgment for another SVS customer.

JURISDICTIONAL STATEMENT

The district court had jurisdiction over the proceedings below under 28 U.S.C. §§ 1331, 1338. This Court has appellate jurisdiction under 28 U.S.C. § 1295(a)(1). This appeal was timely filed within 30 days after entry of the final judgment or order appealed from. *See* Fed. R. App. P. 4(a)(1)(A).

The judgment and orders appealed from are final pursuant to the district court's entry of final judgment and certification under Fed. R. Civ. P. 54(b).

INTRODUCTION

At trial, Gap's validity expert and Alexsam's validity expert agreed that the SVS prior art system includes all of the elements of the claims-in-suit. The experts also agreed that the conception of the SVS system predated the filing date of the claims-in-suit by over seven months. Thus, for the claims to remain patentable under 35 U.S.C. § 102, Alexsam had to establish an earlier conception date.

In an effort to do just that, Alexsam showed the jury 14 exhibits purporting to corroborate that the inventor, Robert Dorf, conceived of the claims before the date of the SVS system. But in Mr. Dorf's own words at trial, these documents are not sufficient to teach someone skilled in the art how to practice the invention.

Gap Attorney: And this sentence doesn't disclose the fields of data that would be transmitted in the point-of-sale activation; correct, sir?

Mr. Dorf: It does not have that particular detail.

Gap Attorney: But, nonetheless, you believe that this is sufficient to show that you had the idea for point-of-sale activation; right, sir?

Mr. Dorf: It's sufficient to put it in my memory, to trigger my memory to tell me when I thought about it. It's not sufficient to teach someone how to do it. There's a difference.¹

Mr. Dorf then confirmed that he would not have documents describing the technical details of his invention.

¹ A01870.

Gap Attorney: And despite the fact that this isn't a technical document, you believe that's sufficient to support the fact that you had the idea to perform point-of-sale activation at this time?

Mr. Dorf: I think we're talking about two different things. I think you bring up an important point. If you need to have a technical person to describe the technical detail, you want to have a technical document. . . . As you well pointed out, I'm not a technician, a technical software person. So I would not have had that kind of a document.²

Nevertheless, the jury concluded that the claims-in-suit remained valid.

Was the jury's conclusion the result of being told by Alexsam's lawyer at the closing argument that “[i]t is the Defendants' burden to prove their defenses of invalidity in this case,” and “[t]hat burden never, ever, ever shifts to Mr. Dorf, never, because these patents are presumed to be valid”?³ Of course, we will never know. But we do know that Alexsam's lawyer's argument does not reflect this Court's conception date jurisprudence. Indeed, this Court's rule is that the burden of demonstrating an earlier conception date rests with the patentee, not the Defendants. *Allergan v. Apotex* confirmed this bedrock principle yet again a few months ago, as this Court explained that “[w]hile defendants bear the burden of persuasion to show that the [asserted] references are prior art to the [patent-in-suit]

² A01872.

³ A00145.

by clear and convincing evidence, the patentee nevertheless must meet its burden of production to demonstrate an earlier conception date.”⁴

Application of the proper legal framework to the facts of this case warrants an outcome opposite of the jury verdict. This brief sets forth the record evidence establishing the deficiencies of each of the 14 exhibits relied on by Alexsam to establish an earlier conception date. These documents fail to disclose at least the claimed elements of (1) “unmodified existing standard retail point-of-sale device,” and (2) the transmission of an “activation amount.” Thus, Alexsam does not have the corroborative evidence necessary to be able to turn back the clock of the claims-in-suit so they come before the SVS system. Consequently, the teachings of the SVS system invalidate the claims-in-suit.

And even if this Court finds that Alexsam’s claims-in-suit are not anticipated by the SVS prior art system, those claims are nevertheless unpatentable under the Supreme Court’s recent precedent in *Alice Corp. Pty. Ltd. v. CLS Bank Int’l*. Previously, in *Alexsam, Inc. v. IDT Corp.*, a judge of this Court concluded that one of the patents-in-suit, the ’608 patent, simply claimed an abstract idea without contributing to the advancement of technology.⁵ Under *Alice Corp.*, the dissenting opinion in *Alexsam v. IDT* now appears to represent the state of the law on

⁴ *Allergan, Inc. v. Apotex, Inc.*, 754 F.3d 952, 967 (Fed. Cir. 2014); *see also Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 871 (Fed. Cir. 2010).

⁵ *Alexsam, Inc. v. IDT Corp.*, 715 F.3d 1336, 1349-51 (Fed. Cir. 2013).

patentability. Accordingly, Gap invites this Court to reconsider the patentability of the claims-in-suit under *Alice Corp.*

STATEMENT OF THE ISSUES

- (1) Alexsam conceded that the SVS prior art system discloses each and every limitation of the asserted claims. But Alexsam contended that the patents were entitled to an earlier invention date that predated the SVS system. Under this Court's precedent, an inventor is only entitled to such an earlier date based on corroborating evidence, which must be sufficient to enable one skilled in the art to practice all of the elements of the invention. To corroborate Mr. Dorf's testimony, Alexsam introduced 14 documents that discussed some—but not all—aspects of the invention. And Mr. Dorf testified that although these documents triggered his own memories about conception of the invention, he was unable to produce any documents that would teach a person how to practice his invention. Should the Court hold that Alexsam failed as a matter of law to satisfy its burden in establishing prior invention, and that the asserted claims are thus invalid as anticipated?
- (2) The asserted claims cover the abstract idea of using the pre-existing credit card system to process another type of electronic card—the gift card. A dissenting opinion from this Court in *Alexsam, Inc. v. IDT Corp.* previously concluded that one of the patents-in-suit is directed to unpatentable subject matter. Subsequently, the Supreme Court issued an opinion in *Alice Corp.*, holding that abstract ideas implemented through computers are not patentable unless they advance technology. Thus, the dissenting opinion in *Alexsam, Inc. v. IDT Corp.* appears to now represent the state of the law on patentability. Should the Court apply the *Alice Corp.* rule to Alexsam's patents and hold the claims-in-suit invalid under 35 U.S.C. § 101?

STATEMENT OF THE CASE

In March 2010, Alexsam sued Gap and several other defendants in the United States District Court for the Eastern District of Texas, alleging that their gift card systems infringed various claims of the '608 and '787 patents. Gap denied those allegations and asserted non-infringement and invalidity counterclaims. The district court thereafter severed the matter into separate cases for each defendant, one of which is this case.⁶ The district court, however, later ordered a consolidated invalidity and unenforceability trial. At the invalidity trial, Gap presented evidence that the asserted claims were anticipated by an SVS electronic gift card system disclosed in December 1996—several months before the July 10, 1997, effective filing date of the Alexsam patents-in-suit.⁷ Alexsam conceded that the SVS system met every limitation of the asserted claims.⁸

Alexsam argued instead that this system was not prior art because Mr. Dorf had actually invented his asserted claims before December 1996.⁹ The jury returned a general verdict finding that the claims were not invalid on the basis of

⁶ A02204-08.

⁷ A01259-60, A01260-61, A01233.

⁸ A01967-68.

⁹ A01787-88, A02214-15.

anticipation.¹⁰ The district court thereafter denied Gap's timely renewed motion for judgment as a matter of law. This timely appeal followed.

Seven weeks after the consolidated invalidity trial, a separate trial on Alexsam's infringement claims against Gap commenced. Before the infringement trial, Alexsam dropped its allegations that Gap infringed any claims of the '608 patent. Thus, the only remaining claims asserted against Gap in the infringement trial were claims 1 and 19 of the '787 patent. On June 28, 2013, the jury found that Gap did not infringe the claims asserted by Alexsam.¹¹

STATEMENT OF FACTS

I. THE PATENTS-IN-SUIT

Both the '608 and '787 patents are entitled MultiFunction Card System and have an effective filing date of July 10, 1997.¹² The patents share a common specification and name Mr. Dorf as the sole inventor. The patents disclose a system for activating different types of prepaid cards at a point-of-sale ("POS") device, such as a cash register.¹³

¹⁰ A00001-03. Gap also presented evidence that Jay Levenson, an independent contractor hired by Mr. Dorf, had actually contributed elements of Mr. Dorf's claimed system, and was therefore an unnamed inventor. The jury found that the patents were not invalid for improper inventorship.

¹¹ A00004-06.

¹² A00385, A00400.

¹³ A00385, A00400.

At the invalidity trial, Gap asserted that claims 1, 34, 36, 37, 57, 58, 60, 62, and 65 of the '608 patent and claims 1, 2, and 19 of the '787 patent were invalid.¹⁴

Claim 34 of the '608 patent is representative with relevant terms underlined:

34. A system comprising:

- a. at least one electronic gift certificate card having an electronic gift certificate card unique identification number encoded on it, said electronic gift certificate card unique identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;
- b. a transaction processor receiving electronic gift card activation data from an unmodified existing standard retail point-of-sale device, said electronic gift certificate card activation data including said unique identification number and an electronic gift certificate card activation amount;
- c. a processing hub receiving directly or indirectly said activation data from said transaction processor; and
- d. said processing hub activating an account corresponding to the electronic gift certificate card unique identification number with a balance corresponding to the electronic gift certificate activation amount.¹⁵

Accordingly, the claimed system in the '608 patent requires, *inter alia*, the following elements:

- (1) a gift card,
- (2) a “bank identification number” (BIN) encoded on the gift card,
- (3) a “transaction processor” that receives “activation data,”

¹⁴ A00001-03.

¹⁵ A00395.

- (4) an “unmodified existing standard point-of-sale device” that sends the activation data to the transaction processor,
- (5) a “processing hub” that receives activation data,
- (6) an “activation amount” included in the activation data sent from the unmodified existing standard POS device to the transaction processor and processing hub, and
- (7) the activation of an account corresponding to the BIN.

Claim 1 of the '787 patent is also representative with relevant terms underlined:

1. A multifunction card system, comprising:
 - a. at least one electronic gift certificate card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said multifunction card system;
 - b. a bank processing hub computer under bank hub software control and in communication over a banking network with a pre-existing standard retail point-of-sale device, said bank processing hub computer receiving electronic gift certificate card activation data when said electronic gift certificate card is swiped through said point-of-sale device, said electronic gift certificate card activation data comprising said unique identification number of said electronic gift certificate card and an electronic gift certificate activation amount; and
 - c. a gift certificate card computer under gift certificate card software control and in communication with said bank processing hub for activating a gift certificate card account in a gift certificate card database corresponding to said electronic gift certificate card, said gift certificate card account comprising balance data representative of an electronic gift certificate activation amount.¹⁶

¹⁶ A00409

Accordingly, the claimed system in the '787 patent requires, *inter alia*, the following elements:

- (1) a gift card,
- (2) a “bank identification number” (BIN) encoded on the gift card,
- (3) a “bank processing hub computer” that receives “activation data,”
- (4) a “pre-existing standard point-of-sale device” that sends the activation data to the bank processing hub computer,
- (5) a “gift certificate card computer” that receives activation data,
- (6) an “activation amount” included in the activation data sent from the pre-existing standard POS device to the gift certificate card computer, and
- (7) the activation of an account corresponding to the BIN.

Significantly for purposes of this appeal, all of the claims-in-suit require the sending of “an activation amount” from the POS device to the back office computers involved in the transaction. All of the claims-in-suit, with two exceptions,¹⁷ require a “gift card.” And all of the claims-in-suit in the '608 patent require an “unmodified existing standard point-of-sale device.”¹⁸

¹⁷ Claim 57 of the '608 patent recites “a card” for use in a “multifunction card system,” while claim 60 recites “a prepaid card.” A00396-97.

¹⁸ The district court construed “unmodified” to mean a terminal that “has not been reprogrammed, customized, or otherwise altered with respect to its software or hardware for use in the card system.” A02322.

II. THE SVS GIFT CARD SYSTEM

SVS is a company that provides gift cards and gift card processing services to retailers. Retailers that use the SVS system include Gap and some of the other companies that Alexsam sued in the original consolidated case.¹⁹ SVS indemnified these retailers.²⁰

SVS initially entered the electronic card business when it created an electronic benefit card to replace paper food stamps for the State of Ohio.²¹ In 1990, as a way to ensure that its card numbers were unique and distinguishable from other companies' card numbers, SVS obtained a BIN, 600649.²²

By January of 1996, after establishing its ability to replace paper food stamps with electronic cards, SVS had developed a detailed system design and technical specifications to allow its retailer customers to replace paper gift certificates with electronic gift cards.²³ SVS modified its existing card system and added many options to suit the needs of various retailers for electronic gift cards.²⁴

¹⁹ A01221-22.

²⁰ See A01254. SVS also indemnified Pier 1 in a prior case in which Alexsam sued Pier 1. Alexsam has sent infringement letters to other SVS customers, including several that Alexsam has yet to sue. A02156-88.

²¹ A01220.

²² A01223-24, A03217-18.

²³ A01221.

²⁴ A01222.

The SVS system was flexible by design to facilitate the addition of new retailer customers without implementing a new system to suit the needs of each retailer.²⁵

The first two retailers to use the gift card configuration of the SVS system were Mobil and Kmart.²⁶ The document identifying the Mobil configuration of the SVS system is dated January 3, 1996, eighteen months before Mr. Dorf applied for his patents.²⁷ The document identifying the Kmart configuration of the SVS system is dated December 17, 1996, seven months before Mr. Dorf's patent application.²⁸ These documents establish that the early SVS system teaches all of the elements of the claims-in-suit— an undisputed fact in this case.

Key aspects of the SVS system include: (1) using a BIN to create a unique card account number;²⁹ (2) various options for activating the account, including POS activation;³⁰ (3) using a retailer's existing terminals for card transactions;³¹

²⁵ A01261.

²⁶ A01222.

²⁷ A00415.

²⁸ A00584.

²⁹ A01224.

³⁰ A01226.

³¹ A01229-30.

and (4) transmission of an activation amount from the terminal to SVS's database computers.³²

Mobil launched Phase I of its gift card program with SVS in May 1996, which involved selling "hot" cards (*i.e.*, cards activated and loaded with value before they arrive at the store for sale).³³ The Mobil gift cards included SVS's BIN at the beginning of their card numbers, as evidenced by transaction records pulled from SVS's database and introduced at trial.³⁴

The Mobil configuration document also stated that "enhancements over the current product will be provided in Phase II."³⁵ As part of the Phase II deployment, SVS conceived of activating Mobil gift cards at the point-of-sale:

Phase II implementation will be accomplished by *activation through a POS transaction* (if sold through a dealer) or at the time of shipment to a purchaser such as a third party incentive sales organization or end user.³⁶

As SVS software developers testified at trial, the SVS system could perform POS activations at this time, but Mobil decided against deploying Phase II in 1996.³⁷

³² A01262-63.

³³ A00423, A00427.

³⁴ A01224, A00500.

³⁵ A00423.

³⁶ A00427.

³⁷ A01259-60, A01260-61. Mobil agreed to implement Phase II in 1998. A01260.

After developing POS-activated gift cards for Mobil, SVS deployed this feature with Kmart.³⁸ Alexsam's validity expert, Mr. Baker, agreed that SVS's configuration of its system for Kmart includes all the elements of the '608 and '787 patents.³⁹ The Kmart configuration of the SVS system is memorialized in a document dated December 17, 1996—seven months before Mr. Dorf's patent application.⁴⁰

The Kmart document, like the Mobil document before it, discussed POS activation of gift cards:

*Card will be activated through a POS transaction that provides SVS with the card number, initial value, store identifier, and timestamp.*⁴¹

Like the Mobil gift cards, the Kmart gift card numbers began with SVS's BIN.⁴²

After the Kmart configuration document was completed in December 1996, SVS signed a contract with Kmart on March 31, 1997. That contract specifies that “SVS has already developed such a card-based system and its attendant operational capabilities.”⁴³ An SVS software developer, Michael Hasty, confirmed that this

³⁸ A01233.

³⁹ A01967-68.

⁴⁰ A00584.

⁴¹ A00590.

⁴² A01263-64, A00590.

⁴³ A00603.

clause refers to SVS's pre-existing ability to perform POS activations for gift cards, as disclosed in the Mobil and Kmart configuration documents.⁴⁴

Gap introduced documentary evidence at trial corroborating the reduction to practice of the Kmart implementation of the SVS gift card system at least as early as May 1997. Kmart piloted the SVS gift card system in certain of its stores beginning on May 8, 1997.⁴⁵ The pilot ran through July 1997, until the program was rolled out nationally in August 1997.⁴⁶ As demonstrated at trial, DX-2 includes entries from the SVS database of pilot gift card transactions that occurred in this timeframe, including POS activations.⁴⁷ An example set of such transactions is shown below, with transaction code "7" comprising an activation transaction, and code "4" a purchase transaction:⁴⁸

6006490300000004889	1249	KMART	0000001051	0012155102	751842	5.00	1997/05/08	20:20:52	7
6006490300000004889	1249	KMART	0000001051	0012156104	576552	5.00	1997/05/08	20:21:12	4
6006490300000004889	1249	KMART	0000001051	0012157106	572977	5.00	1997/05/08	20:22:02	7
6006490300000004889	1249	KMART	0000001051	0012158108	467432	5.00	1997/05/08	20:22:39	4
6006490300000004889	1249	KMART	0000001051	0012165106	488619	6.00	1997/05/08	22:11:22	7
6006490300000004889	1249	KMART	0000001051	0012166108	324519	6.00	1997/05/08	22:12:16	4
6006490300000004939	1249	KMART	0000004062	0087594105	888376	30.00	1997/06/25	09:01:29	7

⁴⁴ A01265-66.

⁴⁵ A01236, A01270, A00851.

⁴⁶ A01267.

⁴⁷ A00851, A00841, A000641, A01267-74.

⁴⁸ A00851.

III. ALEXSAM'S ASSERTIONS OF PRE-FILING CONCEPTION AND REDUCTION TO PRACTICE

At trial, Alexsam sought to show a conception date prior to the SVS system by introducing an assortment of Mr. Dorf's sales correspondence and other marketing documents.

Mr. Dorf, however, testified that the documents he relied upon to corroborate a prior conception date did not provide sufficient detail to teach someone who was skilled in the art how to practice his invention.

Gap Attorney: And this sentence doesn't disclose the fields of data that would be transmitted in the point-of-sale activation; correct, sir?

Mr. Dorf: It does not have that particular detail.

Gap Attorney: But, nonetheless, you believe that this is sufficient to show that you had the idea for point-of-sale activation; right, sir?

Mr. Dorf: It's sufficient to put it in my memory, to trigger my memory to tell me when I thought about it. It's not sufficient to teach someone how to do it. There's a difference.⁴⁹

Moments later, Mr. Dorf returned to this theme, testifying that he "would not have" documents describing the technical details of his invention:

Gap Attorney: And despite the fact that this isn't a technical document, you believe that's sufficient to support the fact that you had the idea to perform point-of-sale activation at this time?

Mr. Dorf: I think we're talking about two different things. I think you bring up an important point. If you need to have a technical person to describe the technical detail, you want to have a technical document. . . . As you well

⁴⁹ A01870.

pointed out, I'm not a technician, a technical software person. So I would not have had that kind of a document.⁵⁰

Despite Mr. Dorf's admission that his documents were insufficient, Alexsam presented testimony at trial from Mr. Dorf himself and Mr. Baker in support of three potential dates of prior conception—December 7, 1995, February 23, 1996, and October 1996. Mr. Dorf claimed that he had conceived of all the claim elements of his invention on or before December 7, 1995.⁵¹ Mr. Baker testified that Mr. Dorf had conceived of all the elements of his invention by February 23, 1996.⁵² And, as a fallback, both Mr. Dorf and Mr. Baker claimed that Mr. Dorf's testing of a system at Meijer stores for the activation of MCI phone cards in October 1996 established his prior conception and reduction to practice.⁵³

At trial and during post-trial briefing, Gap explained that Alexsam had not proven Mr. Dorf's conception or reduction to practice of the following claim elements prior to filing his patent application: (1) “unmodified existing standard retail point-of-sale device,” and (2) the transmission of an “activation amount.”

⁵⁰ A01872.

⁵¹ A01787-88, A02214-15.

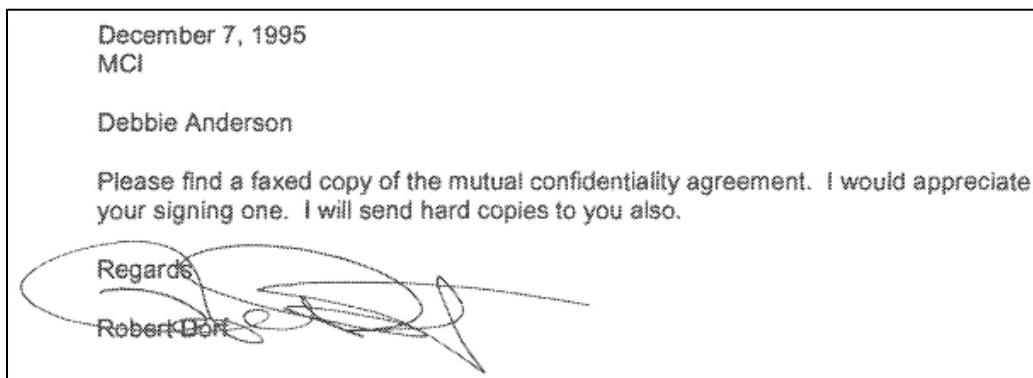
⁵² A01971-72.

⁵³ A01895-96, A01974.

A. Mr. Dorf's Claim of a December 7, 1995 Conception Date is Uncorroborated

In support of his claim at trial of a December 7, 1995 conception date, Mr. Dorf relied on seven documents: PX-226, PX-211, PX-151, PX-183, PX-155, PX-186, and PX-229. However, none of the seven documents describes (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN. To be sure, each of these seven documents lack the necessary detail to teach one of ordinary skill in the art how to practice the invention.

PX-226: PX-226 is the first of the seven documents used to attempt to establish a December 7, 1995 conception date. The entire text of PX-226 is shown below:⁵⁴



⁵⁴ See A001155.

As Mr. Dorf conceded on cross examination, PX-226 does not describe any of the elements of his invention:

Gap Attorney: Actually, I also have a copy of that document here in my hand, Mr. Dorf, just so we can all see it. You see it there, Mr. Dorf?

Mr. Dorf: Yes.

Gap Attorney: It's a one-page document, right, sir?

Mr. Dorf: That's correct.

Gap Attorney: There's three sentences in it, right, sir?

Mr. Dorf: Okay.

Gap Attorney: It doesn't discuss any -- any aspect of your alleged inventions, does it, sir?

Mr. Dorf: The document itself? No.⁵⁵

Accordingly, PX-226 fails to describe the claim elements of (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.

PX-211: PX-211 is the second of the seven documents used to attempt to establish a December 7, 1995 conception date. The exhibit is a memorandum dated August 19, 1997, which is one month after Mr. Dorf applied for his first patent.⁵⁶ PX-211 thus fails to provide any contemporaneous corroboration of Mr.

⁵⁵ A02052.

⁵⁶ A01149-52.

Dorf's claimed conception date of 18 months before he applied for his patents.

Mr. Dorf nonetheless asserted at trial that PX-211 discloses his conception of transmitting an activation amount from the POS terminal.⁵⁷ The single sentence that Mr. Dorf relied on states that “[t]he cards may have specific values or the consumer may choose a value to be added.”⁵⁸ This sentence does not mention an activation amount, nor any technical details for transmitting such an amount through the system. Mr. Dorf also asserted at trial that PX-211 discloses his conception of the use of unmodified POS terminals. One terse passage Mr. Dorf relied on states that “Electronic Gift Certificate™ is a magnetic strip card that is valued through existing POS terminals.”⁵⁹ The other passage that Mr. Dorf relied on states that “retailer has no development at its POS.”⁶⁰ These vague excerpts make no reference to the terminals being unmodified, or how unmodified terminals would operate in the system. In addition to not describing (1) using unmodified POS terminals, or (2) transmitting an activation amount from the POS terminal, PX-211 also does not describe (3) using a BIN.⁶¹

⁵⁷ A01790.

⁵⁸ See A01149.

⁵⁹ A01149, A01790.

⁶⁰ See A01150.

⁶¹ See A01149-52.

PX-151: PX-151 is the third of the seven documents used to attempt to establish a December 7, 1995 conception date. Alexsam introduced PX-151 to show Mr. Dorf's conception of POS activation in April 1995.⁶² Mr. Dorf testified, however, that PX-151's discussion of POS activation related to software developed by WorldDial, a company for which Mr. Dorf was engaged as a salesman:

Gap Attorney: And now let's focus on the second bullet: CTC will use its proprietary software to allow all POS machines to activate phone cards. What was the proprietary software that CTC had as of April 1995?

Mr. Dorf: Well, that would have been WorldDial's.⁶³

WorldDial had a working technical platform and performed POS activation of prepaid cards before Mr. Dorf started making sales calls on WorldDial's behalf:

Gap Attorney: Okay. And did WorldDial have point-of-sale activation of the prepaid cards?

Mr. Dorf: Yeah. They did.

Gap Attorney: And WorldDial did this before you got involved with WorldDial?

Mr. Dorf: Yes.⁶⁴

Mr. Dorf also testified that PX-151 does not disclose any of the technical details required for activating cards at the POS, such as messaging codes, message

⁶² See A01757.

⁶³ A01874.

⁶⁴ A01851-52.

formats, or the fields of data transmitted.⁶⁵ As Mr. Dorf conceded, PX-151 is “not sufficient to teach someone how to do it.”⁶⁶ In addition to POS activation, PX-151 does not describe (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.⁶⁷

PX-183: PX-183 is the fourth of the seven documents used to attempt to establish a December 7, 1995 conception date. Similar to PX-151, PX-183 discusses the WorldDial system—a system developed by a third party—and thus fails to corroborate an earlier conception date for Mr. Dorf’s system.⁶⁸ And the single sentence of the document that Alexsam relies on, which appears below, establishes that Mr. Dorf was discussing a system requiring modifications to the POS terminal software:⁶⁹

2. World Dial will install the software for the client, so that their POS terminals will accept the new network.

⁶⁵ A01870.

⁶⁶ A01870-71.

⁶⁷ See A01127-29.

⁶⁸ A01136.

⁶⁹ *Id.* The district court construed “unmodified” to mean a terminal that “has not been reprogrammed, customized, or otherwise altered with respect to its software or hardware for use in the card system.” A02322.

PX-183 thus does not describe (1) using unmodified POS terminals; in addition, PX-183 does not describe (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.⁷⁰

PX-155: PX-155 is the fifth of the seven documents used to attempt to establish a December 7, 1995 conception date. Alexsam introduced PX-155 to show Mr. Dorf's conception of transmitting an activation amount from the POS terminal. The text Alexsam relies on—" [Mr. McGrath] inquired as to whether customers could add or subtract value to the card easily at the POS terminals"—contains no reference to this element, however.⁷¹ Rather, it reflects an inquiry from a potential customer, with no explanation of any technical solution to address the inquiry. Moreover, Mr. Dorf testified that he never proposed to J.C. Penney (the recipient of PX-155) a system using its existing POS terminals, and he had not conceived of using a BIN at the time of PX-155 in June 1995:

Gap Attorney: So you proposed using -- to J.C. Penney using their existing terminals for activating the electronic gift card?

Mr. Dorf: No, I don't think that occurred.⁷² . . .

⁷⁰ See A01136. Indeed, with respect to the POS terminals, PX-183 states that their software will be modified: "WorldDial will install the software for the client, so that their POS terminals will accept the new network."

⁷¹ A01132, A01772-73.

⁷² A01877.

Gap Attorney: In July of 1995 – I’m sorry -- in June of 1995, you hadn’t had the idea of putting a BIN on a gift card yet, correct?

Mr. Dorf: Correct.⁷³

PX-155 thus does not describe (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.

PX-186: PX-186 is the sixth of the seven documents used to attempt to establish a December 7, 1995 conception date. Alexsam cited a single paragraph of PX-186 to show conception of the claimed “processing hub.”⁷⁴ This paragraph, which appears below in its entirety, mentions the “WorldDial Activating Hub” and a “new Activation Hub”:⁷⁵

I have been told that WorldDial does not wish to market phone time as its primary business. This I was told after trying to market phone time. I therefore changed horses to try and market the software technology that WorldDial had and that I asked to be created, as with phone card activation and the creation of the EGC network using the World Dial Activating hub. (see JC Penney) (please also see marketing papers that I sent about the new Activation Hub) This then lead to GTE, Cable, McLane, Supervalu, etc. It also leads us to a new proposal that we are to create for Kroger.

The “WorldDial Activating Hub” refers to the pre-existing WorldDial system, for which Mr. Dorf was engaged as a salesman. And the excerpt contains no technical details on the “new Activation Hub”; rather, it references other “marketing papers” describing this hub. Alexsam did not produce these other “marketing papers” at

⁷³ A01879.

⁷⁴ See A01777-79.

⁷⁵ A001136.

trial. PX-186 also does not describe (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.

PX-229: PX-229 is the seventh of the seven documents used to attempt to establish a December 7, 1995 conception date. Alexsam cited a single paragraph of PX-229 in an attempt to show Mr. Dorf's conception of the use of a transaction processor and existing POS terminals.⁷⁶ This paragraph, which appears below in its entirety, does not include any details on how activation would be accomplished through the retailer's "central location," or mention existing POS terminals at all:⁷⁷

6. Retailer who wishes POS activation. Activation must be done through their central location for excessive of one thousand locations. We have done the research necessary to arrive at all costs and to create proposal. MCI would have to analyze the price per min. to charge in order to make this economically viable. Long term contract available. We should include in proposal a % allowed for advertising etc.

PX-229 also does not describe (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) using a BIN.

B. Mr. Baker's Claim of a February 23, 1996 Conception Date Is Uncorroborated

Alexsam's validity expert, Robert Baker, declined to testify in support of Mr. Dorf's claimed conception date of December 7, 1995. Instead, he testified that Mr. Dorf conceived of all of the elements of the invention by February 23, 1996.⁷⁸

⁷⁶ See A01785-86.

⁷⁷ A01156.

⁷⁸ A01971-72.

Mr. Baker based his opinion on the foregoing seven documents, plus Mr. Dorf's February 26, 1996 application to ANSI for a BIN.⁷⁹ ANSI is a private, non-profit organization that assigns BINs to a variety of entities, including banks, colleges, airlines, retailers, movie theaters, and individuals.⁸⁰ As ANSI states on its website, "the purpose of the numbering system is to uniquely identify a card issuing institution in an international interchange environment."⁸¹

This document was introduced at trial as PX-179, and is shown on the next page in its entirety.

⁷⁹ See A01973.

⁸⁰ See A03217-18.

⁸¹ See Issuer Identification Number Factsheet, American National Standards Institute, http://www.ansi.org/other_services/registration_programs/iin_registration.aspx?menuid=10 (last visited Sept. 10, 2014).

APPLICATION FOR ISSUER IDENTIFIER NUMBER

504389

ISO IEC	
This application is submitted in accordance with International standard ISO/IEC 7812, Identification cards - Identification of Issuers - Numbering system, application and registration procedures.	
A. TO BE COMPLETED BY APPLICANT (Card Issuer)	
<p>Name of Organization <i>Intelligent Card</i></p> <p>Address to be Registered (Maximum two lines, 30 characters per line) 7019 Spring Ridge Road Cary, NC 27511</p> <p>Principal Contact in Organization <i>Robert Dorf</i></p> <p>Address for correspondence/billing 7019 Spring Ridge Road Cary, NC 27511</p> <p>Telephone <input type="text" value="6198516447"/> Telex <input type="text" value="6712491"/></p> <p>Anticipated date of first use of number <input type="text" value="3/21/96"/></p> <p>Date <input type="text" value="2/26/96"/> Signature <i>[Signature]</i></p> <p>Brief description of card use <input type="checkbox"/> National Use <i>through local use of Banker's Company</i> <input checked="" type="checkbox"/> International Use <i>Debit</i></p>	<p>MAJOR INDUSTRY</p> <p><input type="checkbox"/> Airlines <input type="checkbox"/> Travel and entertainment <input checked="" type="checkbox"/> Banking Institutions <input type="checkbox"/> Retail merchandising <input type="checkbox"/> Telecommunications <input type="checkbox"/> Petroleum Industry <input type="checkbox"/> Other _____</p> <p>(Please state)</p>
B. TO BE COMPLETED BY NATIONAL STANDARDS BODY	
<p>Application Approved by: <i>American National Standards Institute</i></p> <p>Date <input type="text" value="3/15/96"/> Signature <i>Michelle A. Maas</i></p>	<p>Recommended MIL: <input type="text" value="5"/></p> <p><i>Motulli A. M.</i></p>
C. TO BE COMPLETED BY ISO/IEC 7812 REGISTRATION AUTHORITY	
<p>Issuer Identifier Number or Other Action Taken 504389</p> <p>Date <input type="text" value="3/18/96"/> Signature <i>Rita G. Elliott</i></p>	

This one-page form application does not describe how Mr. Dorf intended to use a BIN, much less include any technical details on Mr. Dorf's system.⁸² And, aside from the BIN element, PX-179 (like the seven documents Mr. Dorf relied on for a December 7, 1995 conception date) does not disclose any element of the claims, including (1) using unmodified POS terminals, and (2) transmitting an activation amount from the POS terminal.⁸³

⁸² See A01135.

⁸³ *Id.*

C. Messrs. Dorf's and Baker's Alternative Claim of an October 1996 Conception and Reduction to Practice Date Is Uncorroborated

In addition to the aforementioned conception dates of December 7, 1995 (Mr. Dorf's date) and February 23, 1996 (Mr. Baker's date), both Mr. Dorf and Mr. Baker testified in support of an alternative date of conception and reduction to practice: October 1996. They based this on Mr. Dorf's testing of a system at Meijer stores for the activation of MCI phone cards in October 1996.⁸⁴

By way of background, Mr. Dorf's invention includes embodiments directed to phone cards. The patents-in-suit include claims specifically reciting phone cards, including independent claims 16 and 27 of the '608 patent, and 14 and 26 of the '787 patent.⁸⁵ With two exceptions (claims 57 and 60 of the '608 patent), the claims-in-suit require the use of a gift card, which is a different type of card than a phone card.⁸⁶

Alexsam did not introduce any transaction records or other documents at trial showing that the testing of the Meier/MCI phone card system was successful, or that the system was used to process any transactions after the purported testing. Rather, Alexsam relied solely on witness testimony in support of its claim that the

⁸⁴ A01895-96, A01974.

⁸⁵ A00394-95, A00410-11,

⁸⁶ See A02636 ("the phone card business is different from the gift card"). Claim 57 of the '608 patent recites "a card" for use in a "multifunction card system," while claim 60 recites "a prepaid card." A00396-97.

system was reduced to practice in October 1996. And, regardless of whether the testing of phone card transactions was successful, the Meijer/MCI phone card system was never tested or used for any gift card transactions. Mr. Dorf testified that the Meijer/MCI phone card system could have also processed gift card transactions, but documents that he authored at the time in 1996 establish that this is incorrect. Moreover, Mr. Dorf conceded that he lacked knowledge of Meijer's POS system, including whether Meijer made modifications to its terminal software or other aspects of its system in order to activate the MCI phone cards:

Gap Attorney: So what did Meijer have to do to make their system compatible to allow for transactions for MCI prepaid phone cards?

Mr. Dorf: I have no idea at all. It didn't have anything to do with us.⁸⁷ Nonetheless, in support of a claim to an October 1996 conception and reduction to practice date, Alexsam relied on six documents relating to the Meijer/MCI phone card system: PX-162, PX-178, PX-142, PX-174, PX-154, and PX-241. None of these six documents describes (1) using unmodified POS terminals, or (2) transmitting an activation amount from the POS terminal. Indeed, each of these seven documents lacks the necessary detail to support an October 1996 conception and reduction to practice date.

PX-162: PX-162 is the first of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. Mr. Dorf's

⁸⁷ A01900-01.

own words in PX-162 confirm that, after the October testing, the Meijer/MCI phone card system worked for phone cards, but not gift cards. In PX-162, dated November 11, 1996, Mr. Dorf stated that he had not established a system for activating gift cards and was still researching possibilities for doing so:⁸⁸

The exact method for establishing the communication link for an MCI Electronic Gift Certificate has not been finalized with Susan Hunter, although we did review the EGC with her. It is suggested that ICS creates a managing hub collocated with MCI for this and I agree that this should be looked at as one possibility. There are other suggestions that I have when you are ready.

Later in PX-162, Mr. Dorf went on to explain the problems in adapting the phone card system to process gift cards, which further shows that he lacked a workable solution at the time for gift cards and had not reduced a gift card system to practice.⁸⁹

The problem in having an MCI- EGC is one of communication and instant decrementing of cards which have multi functions. To that end ICS offers a number of ideas for discussion purposes .

The EGC is a card which allows a consumer to purchase product in a participating retail establishments , have loyalty points awarded, and also allows the card to be used for purposes of MCI long distance calls.

If a person goes in to a retail establishment and purchases something ICS has the ability to communicate , in real time , a dollar figure to reduce the account balance for the appropriate MCI pin number. This transaction could look similar to other transactions that MCI now accepts when decrementing prepaid phone cards

The problem is more involved when doing the reverse. If the customer wishes to use the card to make long distance calls, MCI would have to seize the account balance that ICS maintains on its hub so that the card can not be used to purchase products at the same time. This would entail MCI developing such software. It would be anticipated that MCI should have similar software available in that two persons should not be able to use the same MCI pin number at the same time now.

⁸⁸ A02218.

⁸⁹ A2225.

Mr. Baker argued that PX-162 included the element of transmitting an “activation amount” from the POS terminal, but conceded that PX-162 does not actually describe this:

Gap Attorney: Well, we’ve also established that having the activation amount entered and sent isn’t actually described in the paragraph that you identify, that you’ve identified in the November 11, 1996 memo; correct?

Mr. Baker: Correct.⁹⁰

PX-178: PX-178 is the second of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. It is a nondisclosure agreement between Mr. Dorf and Michigan National Bank, containing only typical nondisclosure agreement boilerplate. It does not mention phone or gift card systems, let alone any technical details on how the Meijer/MCI phone card system operated.⁹¹

PX-142: PX-142 is the third of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. It is a legal contract between Mr. Dorf and SSTI, which does not contain technical details on how the Meijer/MCI phone card system operated.⁹²

⁹⁰ A01976. PX-162 also does not describe any use of “unmodified POS terminals.”

⁹¹ See A02314-15.

⁹² See A01092-1126.

PX-174: PX-174 is the fourth of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. It is a three-page set of faxes discussing delays in the scheduling of test transactions, which includes no details on the elements of the Meijer/MCI phone card system, or whether testing was performed or completed.⁹³

PX-154: PX-154 is the fifth of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. It is a half-page fax relating to embossed phone cards, which includes Mr. Dorf's BIN number but no other technical details.⁹⁴ PX-154 does not indicate whether any such phone cards were ordered, received, or used.

PX-241: PX-241 is the sixth of the six documents used to attempt to establish an October 1996 conception and reduction to practice date. It is a three-sentence, handwritten note, which includes no technical details on the Meijer/MCI phone card system.⁹⁵

In sum, each of these six documents fail to describe the technical teachings of the invention, including at least the elements of (1) using unmodified POS terminals, or (2) transmitting an activation amount from the POS terminal. Gap's

⁹³ See A02311-13.

⁹⁴ See A1130.

⁹⁵ See A01160-62.

invalidity expert, Rodman Reef, confirmed this at trial, testifying that these six documents, along with the other eight documents relied on by Alexsam, fail to corroborate prior conception of at least those two elements.⁹⁶

SUMMARY OF ARGUMENT

I. ANTICIPATION

Alexsam failed as a matter of law to establish an invention date prior to the SVS system. Alexsam conceded at trial that the prior art SVS system, as configured for Kmart, contains every limitation of the asserted claims. Alexsam argued that Mr. Dorf conceived of and reduced to practice the invention before the SVS system was conceived and reduced to practice. Alexsam introduced 14 exhibits as attempted corroboration. Mr. Dorf , however, admitted that he did not have any documents that would enable a skilled artisan to practice the invention. To be sure, all of the exhibits omit at least the “activation amount” element appearing in all of the asserted claims, and the “unmodified terminal” element appearing in all of the asserted ’608 patent claims. Alexsam’s evidence of conception and reduction to practice also fails to show that Mr. Dorf had a definite, permanent idea such that one skilled in the art could understand his invention. Nor does Alexsam’s evidence show a working system that contained every limitation of the asserted claims. Thus, even accepting all of the facts Alexsam presented at

⁹⁶ A002028-32, A002037-50.

trial as true, Alexsam failed to present legally sufficient evidence of prior invention.

II. UNPATENTABLE SUBJECT MATTER

The asserted claims of the patents-in-suit cover the abstract idea of using the existing credit card system to process a slightly different type of electronic card—the gift card. A dissenting opinion from this Court in *Alexsam, Inc. v. IDT Corp.* previously analyzed Alexsam's '608 patent under 35 U.S.C. § 101 and concluded that it was directed to unpatentable subject matter. After the *IDT* opinion, the Supreme Court issued an opinion in *Alice Corp.*, holding that abstract ideas implemented through computers are not patentable unless they advance technology. Thus, the dissenting opinion in *Alexsam, Inc. v. IDT Corp.* appears to now represent the state of the law on patentability. In light of these facts, a re-evaluation of the issue of whether the claims are invalid under 35 U.S.C. § 101 is appropriate.

ARGUMENT

I. STANDARD OF REVIEW

Issues not unique to patent law are reviewed under the law of the regional circuit; Fifth Circuit law thus applies to this Court’s review of denials of motions for JMOL or new trial, while Federal Circuit law governs determinations of patent law issues.⁹⁷ Accordingly, this Court reviews denials of JMOL under a *de novo* standard, and will uphold a verdict based on substantial evidence.⁹⁸ The denial of a motion for new trial is reviewed for abuse of discretion.⁹⁹ The denial of a new trial will not be reversed absent a “clear showing” of an “absolute absence of evidence to support the jury’s verdict.”¹⁰⁰

II. THE CLAIMS-IN-SUIT ARE ANTICIPATED AS A MATTER OF LAW

An invention is anticipated under 35 U.S.C. § 102(g)(2) if a patentee’s invention has been made by a prior inventor who has not abandoned, suppressed,

⁹⁷ *Finisar Corp. v. DirectTV Group, Inc.*, 523 F.3d 1323, 1328 (Fed. Cir. 2008); *Harris Corp. v. Ericsson Inc.*, 417 F.3d 1241, 1250-51 (Fed. Cir. 2005).

⁹⁸ *ClearValue, Inc. v. Pearl River Polymers, Inc.*, 668 F.3d 1340, 1343 (Fed. Cir. 2012) (“The Fifth Circuit reviews the grant or denial of JMOL *de novo*. . . . We have interpreted the Fifth Circuit’s standard to mean that the jury’s determination must be supported by substantial evidence.”).

⁹⁹ *Industrias Magromer Cueros y Pieles S.A. v. La. Bayou Furs Inc.*, 293 F.3d 912, 924 (5th Cir. 2002).

¹⁰⁰ *Duff v. Werner Enters., Inc.*, 489 F.3d 727, 729 (5th Cir. 2007).

or concealed the invention.¹⁰¹ Anticipation requires clear and convincing evidence that every element of a claim is found in a single prior art reference.¹⁰²

Here, the parties do not dispute that a single prior art system—the SVS system, as described in the Kmart configuration document and the rest of DX-2—contains every element of Alexsam's asserted claims. For its part, Gap is not disputing any facts relating to Alexsam's claims of prior invention, and is not seeking reversal by asking this Court to resolve any factual disputes in its favor. Rather, Gap only challenges the legal significance of the undisputed facts introduced at trial. As detailed below, Alexsam's alleged facts and evidence could not establish, as a matter of law, that the two asserted patents were entitled to an earlier invention date than July 10, 1997, the date when Mr. Dorf filed his first patent application.

A. Alexsam Conceded that the SVS System Contains Every Limitation of the Asserted Claims

Alexsam and its validity expert Mr. Baker conceded at trial that the SVS prior art system was conceived in December 1996,¹⁰³ and therefore predated the July 1997 filing date of the patents-in-suit. Alexsam and its expert further agreed

¹⁰¹ *Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1035 (Fed. Cir. 2001).

¹⁰² *Verizon Servs. Corp. v. Cox Fibernet Va., Inc.*, 602 F.3d 1325, 1339 (Fed. Cir. 2010).

¹⁰³ A01957.

that the SVS system discloses each and every limitation of every asserted claim from both patents-in-suit.¹⁰⁴

B. The Burden Shifted to Alexsam to Establish a Prior Conception Date

Where, as here, a defendant has established prior invention, the burden of production shifts to the patentee to come forward with evidence and argument to the contrary.¹⁰⁵ This Court explained and applied this principle in *Research Corp. Techs. v. Microsoft*:

Because Microsoft effectively satisfied its initial burden by coming forward with invalidating prior art, the burden was on RCT to come forward with evidence to show that the '310 patent was not actually prior art. The district court therefore correctly placed the burden on RCT to come forward with evidence to show entitlement to an earlier filing date.¹⁰⁶

A patentee can meet this burden by demonstrating: (1) it reduced its invention to practice first, or (2) it was the first party to conceive of the invention and then diligently reduced that invention to practice.¹⁰⁷ Priority, conception, and reduction to practice are questions of law based on subsidiary factual findings,¹⁰⁸

¹⁰⁴ A01967-68.

¹⁰⁵ *Research Corp. Techs. v. Microsoft Corp.*, 627 F.3d 859, 871 (Fed. Cir. 2010); *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1329 (Fed. Cir. 2008); *Dow Chem. Co. v. Astro-Valcour, Inc.*, 267 F.3d 1334, 1339 (Fed. Cir. 2001).

¹⁰⁶ 627 F.3d at 871.

¹⁰⁷ *Solvay S.A. v. Honeywell Int'l, Inc.*, 622 F.3d 1367, 1376 (Fed. Cir. 2010)

¹⁰⁸ *Cooper v. Goldfarb*, 154 F.3d 1321, 1327 (Fed. Cir. 1998).

and corroboration is a subsidiary factual finding.¹⁰⁹ This Court exercises plenary review of the district court's legal conclusions regarding the requirements of Section 102(g).¹¹⁰

C. Alexsam's Corroboration Evidence Fails as a Matter of Law In Light of the Inventor's Admissions

An inventor's testimony about conception and reduction to practice is not sufficient by itself to prove prior conception. Because conception and aspects of reduction to practice take place in the inventor's mind, this Court requires objective evidence to corroborate the inventor's testimony.¹¹¹ As the Court explained in *Burroughs v. Barr*, such objective evidence must be contemporaneous and enable one of skill in the art to make the invention:

Because it is a mental act, courts require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention.¹¹²

¹⁰⁹ *Medichem, S.A. v. Rolabo, S.L.*, 437 F.3d 1157, 1171 (Fed. Cir. 2006).

¹¹⁰ *Teva Pharm. Indus. v. Astrazeneca Pharms. LP*, 661 F.3d 1378, 1381 (Fed. Cir. 2011).

¹¹¹ *Medichem*, 437 F.3d at 1170 (the corroboration requirement "provides an additional safeguard against courts being deceived by inventors who may be tempted to mischaracterize the events of the past through their testimony."); *Price v. Symsek*, 988 F.2d 1187, 1194 (Fed. Cir. 1993) ("Throughout the history of the determination of patent rights, oral testimony by an alleged inventor . . . is regarded with skepticism, and as a result, such inventor testimony must be supported by some type of corroborating evidence.").

¹¹² *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994).

Corroboration is evaluated under a “rule of reason,” which involves an assessment of all pertinent evidence so that the credibility of the inventor’s story can be tested.¹¹³ This Court’s precedent is clear that the objective evidence used to corroborate an inventor’s testimony must be sufficient to enable a skilled artisan to practice the invention.¹¹⁴ An enabling disclosure “must teach those skilled in the art how to make and use the full scope of the claimed invention.”¹¹⁵ Thus, Alexsam was required to introduce evidence of a contemporaneous disclosure by Mr. Dorf that would have enabled a skilled artisan to practice Alexsam’s claimed gift card system.

Mr. Dorf, however, testified that the documents Alexsam relied upon to corroborate a prior conception date were sufficient to “trigger [his] memory,” but did not provide sufficient detail to teach others:

Gap Attorney: And this sentence doesn’t disclose the fields of data that would be transmitted in the point-of-sale activation; correct, sir?

Mr. Dorf: It does not have that particular detail.

Gap Attorney: But, nonetheless, you believe that this is sufficient to show that you had the idea for point-of-sale activation; right, sir?

¹¹³ *Coleman v. Dines*, 754 F.2d 353, 360 (Fed. Cir. 1985).

¹¹⁴ *Id.* (“[corroborating evidence must] show[] that the inventor disclosed to others his completed thought expressed in such clear terms as to enable those skilled in the art to make the invention.”) (internal quotation marks and citation omitted).

¹¹⁵ *Harris Corp. v. IXYS Corp.*, 114 F.3d 1149, 1155 (Fed. Cir. 1997).

Mr. Dorf: It's sufficient to put it in my memory, to trigger my memory to tell me when I thought about it. It's not sufficient to teach someone how to do it. There's a difference.¹¹⁶

Mr. Dorf then conceded that he was unable to generate an enabling disclosure, testifying “[i]f you need to have a technical person to describe the technical detail, you want to have a technical document . . . As you well pointed out, I'm not a technician, a technical software person. So I would not have had that kind of a document.”¹¹⁷

Not only was Mr. Dorf unable to present an enabling disclosure, but for the Meijer/MCI phone card system—Alexsam's only example of a prior reduction to practice—Mr. Dorf confirmed that he had no knowledge of the frontend POS software and hardware used by Meijer:

Gap Attorney: So what did Meijer have to do to make their system compatible to allow for transactions for MCI prepaid phone cards?

Mr. Dorf: I have no idea at all. It didn't have anything to do with us.¹¹⁸

Mr. Dorf's lack of knowledge of key elements of the invention is not surprising when the documentation he relied on for prior conception and reduction to practice is considered as a whole. These documents show that Mr. Dorf engaged in a series of efforts to use an assortment of others' equipment and

¹¹⁶ A01870.

¹¹⁷ A01872.

¹¹⁸ A01900-01.

systems to accomplish POS activation, which was by then a well-known concept in the industry. Indeed, the documents Mr. Dorf relied on discuss using systems and concepts already being operated by a variety of different entities, including WorldDial, J.C. Penney, ANSI, MCI, Meijer, Michigan National Bank, and SSTi.¹¹⁹

Given Mr. Dorf's admissions and the shortcomings of his documentary evidence, Alexsam could not meet this Court's requirement of introducing evidence of a contemporaneous disclosure that would have enabled a skilled artisan to practice the asserted claims.

D. Alexsam Failed to Present Legally Sufficient Evidence of Prior Conception

Even if Mr. Dorf's admissions were not fatal to Alexsam's efforts to prove prior conception, the patchwork of correspondence and other documents on which Alexsam relied for corroboration are insufficient as a matter of law to establish prior conception. Alexsam failed to present corroboration describing all of the claimed limitations. As such, Alexsam was not entitled as a matter of law to an invention date before July 10, 1997, the date of Mr. Dorf's first patent application.

¹¹⁹ See Discussion of PX-226, PX-211, PX-151, PX-183, PX-155, PX-186, PX-229, PX-179, PX-162, PX-178, PX-142, PX-174, PX-154, and PX-241, *supra*.

To establish conception, an inventor must show possession of every feature and limitation of the claims at the time of the alleged conception.¹²⁰ As this Court has explained, “[o]ne shows that one is ‘in possession’ of the invention by describing the invention, with all its claimed limitations, not that which makes it obvious.”¹²¹ In *Burroughs v. Barr*, the Court set forth the test for conception: “[t]he test for conception is whether the inventor had an idea that was definite and permanent enough that one skilled in the art could understand the invention.”¹²² To satisfy this test, the inventor must have had “a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.”¹²³

Here, Alexsam failed to present corroboration of at least two claimed elements. *First*, Alexsam introduced no evidence that Mr. Dorf had earlier conceived of transmitting an “activation amount” from the POS terminal to the relevant back office computers, as all of the asserted claims in both patents require. In an attempt to corroborate his prior conception of this element, Mr. Dorf relied on two documents: PX-211, and PX-155.

¹²⁰ *Coleman v. Dines*, 754 F.2d 353, 359 (Fed. Cir. 1985); *see also Kridl v. McCormick*, 105 F.3d 1446, 1449 (Fed. Cir. 1997) (“Conception must include every feature or limitation of the claimed invention.”).

¹²¹ *Lockwood v. American Airlines*, 107 F.3d 1565, 1572 (Fed. Cir. 1997).

¹²² 40 F.3d at 1228.

¹²³ *Id.*

Mr. Dorf's reliance on PX-211 directly contradicted impeachment testimony presented at trial in which Mr. Dorf stated that PX-211 is "not a document that I understand."¹²⁴ And PX-211 is irrelevant as a matter of law to establishing an earlier conception date, as it is dated August 19, 1997, over one month after Mr. Dorf applied for his first patent.¹²⁵ Because it post-dates the application date, PX-211 cannot provide the necessary "contemporaneous" corroboration of the three potential earlier conception dates—December 7, 1995, February 23, 1996, and October 1996—that Alexsam advocated at trial.¹²⁶

Even if it were somehow relevant, PX-211 does not disclose the transmission of an activation amount. The passage that Mr. Dorf relied on states "[t]he cards may have specific values or the consumer may choose a value to be added,"¹²⁷ but does not mention an activation amount, much less the technical details for using such an amount in the system.

Similarly, PX-155 does not reference an activation amount, nor include any of the technical details for using that data. Rather, the single sentence from PX-

¹²⁴ A01892-93.

¹²⁵ See A01149-52.

¹²⁶ See *Burroughs*, 40 F.3d at 1228 ("Because it is a mental act, courts require corroborating evidence of a contemporaneous disclosure that would enable one skilled in the art to make the invention.").

¹²⁷ See A01149.

155 that Alexsam relies on—“[Mr. McGrath] inquired as to whether customers could add or subtract value to the card easily at the POS terminals”¹²⁸—references an inquiry from a potential customer, but offers no details on a solution to that inquiry. Thus, PX-211 and PX-155 do not show that Mr. Dorf had a definite, permanent idea that would enable one skilled in the art to practice the activation amount limitation of the claimed invention.¹²⁹

For his part, Mr. Baker declined to rely on PX-211 or PX-155 as corroboration of prior conception of the activation amount limitation. Instead, he relied on a third document, PX-162, a November 11, 1996 memorandum from Mr. Dorf to Bryan Ichikawa.¹³⁰ Mr. Baker argued that this element was “implied” in PX-162, but conceded that PX-162 does not actually describe it:

Gap Attorney: Well, we’ve also established that having the activation amount entered and sent isn’t actually described in the paragraph that you identify, that you’ve identified in the November 11, 1996 memo; correct?

Mr. Baker: Correct.¹³¹

As this Court has held, such “general and conclusory” assertions are insufficient to support a jury verdict.¹³²

¹²⁸ A01132.

¹²⁹ *Burroughs*, 40 F.3d at 1228.

¹³⁰ A02218-25.

¹³¹ A01976.

Second, Alexsam introduced no evidence that Mr. Dorf had earlier conceived of using “unmodified” terminals, as all of the asserted claims of the ’608 patent require. In an attempt to corroborate his prior conception of this element, Mr. Dorf again relied on PX-211. As detailed above, PX-211 post-dates the patent application date, and thus cannot serve as contemporaneous corroborating evidence. Even if it could, PX-211 describes the Meijer/MCI phone card system, and Mr. Dorf admitted during trial that he did not “know what the actual software was” that was running on the terminals in that system.¹³³ This admission was critical due to the Court’s construction of “unmodified” as precluding any changes to the terminal software.¹³⁴

Indeed, Mr. Dorf testified that he had “no idea at all” about whether Meijer’s terminals were truly “unmodified” during the testing.¹³⁵ Thus, because the sole

¹³² *Whitserve, LLC v. Computer Packages, Inc.*, 694 F.3d 10, 24 (Fed. Cir. 2012) (“general and conclusory testimony is not enough to be even substantial evidence in support of a verdict”); *Jacobs v. Department of Justice*, 35 F.3d 1543, 1548 (Fed. Cir. 1994) (“This is not even substantial evidence. There is literally no evidence here; the statement is purely conclusory.”); *see also Anthony v. Chevron U.S.*, 284 F.3d 578, 583 (5th Cir. 2002) (“In order to survive a Rule 50 motion . . . the evidence must be sufficient so that a jury will not ultimately rest its verdict on mere speculation and conjecture.”).

¹³³ A01899-901.

¹³⁴ The district court construed “unmodified” to mean a terminal that “has not been reprogrammed, customized, or otherwise altered with respect to its software or hardware for use in the card system.” A02322.

¹³⁵ A01899-901.

named inventor did not know the software running on the terminals, he could not and did not describe an invention with an “unmodified” terminal at his claimed time of conception.¹³⁶ And to be sure, the passages Mr. Dorf relied on in PX-211—“Electronic Gift Certificate™ is a magnetic strip card that is valued through existing POS terminals,” and “retailer has no development at its POS”—do not mention that the terminals would be unmodified, or explain how the system would operate with unmodified terminals.¹³⁷

Alexsam’s expert, Mr. Baker, agreed that no documents corroborate Mr. Dorf’s conception of the use of unmodified point-of-sale terminal in 1995.¹³⁸ During his testimony, Mr. Baker did not rely on any documents that could corroborate Mr. Dorf’s claim to an earlier conception date for this limitation prior to the asserted patents’ July 1997 application date. Instead, Baker testified generally that Mr. Dorf had conceived of all the elements by February 1996.¹³⁹ Such unsupported testimony is insufficient under this Court’s jurisprudence to

¹³⁶ *Burroughs*, 40 F.3d at 1228.

¹³⁷ A01149.

¹³⁸ A01971.

¹³⁹ A01960-61.

establish an earlier conception date for the “unmodified POS terminals” limitation.¹⁴⁰

Accordingly, Alexsam failed to present legally sufficient evidence of any conception date before July 10, 1997, when Mr. Dorf applied for his first patent.

E. Alexsam Failed to Present Legally Sufficient Evidence of Reduction to Practice

Alexsam similarly failed as a matter of law to establish that Mr. Dorf reduced his invention to practice prior to the SVS system.

To demonstrate reduction to practice, the inventor must have:

(1) constructed an embodiment or performed a process that met all the limitations, and (2) determined that the invention would work for its intended purpose.¹⁴¹ As with conception, this Court has repeatedly emphasized what does not qualify as a reduction to practice. For example, reduction to practice is not established if the constructed embodiment or performed process lacks an element recited in the

¹⁴⁰ See *Whitserve*, 694 F.3d at 24; *Jacobs*, 35 F.3d at 1548; see also *Anthony*, 284 F.3d at 583.

¹⁴¹ *In re Omeprazole Patent Litig. v. Apotex Corp.*, 536 F.3d 1361, 1373 (Fed. Cir. 2008); see also *Aro Mfg. Co. v. Convertible Top Replacement Co.*, 365 U.S. 336, 344 (1961) (a combination patent covers only the totality of elements in the claim); *Net MoneyIN, Inc. v. VeriSign, Inc.*, 545 F.3d 1359, 1371 (Fed. Cir. 2008) (a prior art reference must show each element arranged in the same way as the claimed invention).

claim or uses an equivalent of that element.¹⁴² Similarly, successful testing to demonstrate that the invention operates “in principle” is not a reduction to practice.¹⁴³ Instead, proof of actual reduction requires showing that the apparatus actually existed and worked for its intended purpose.¹⁴⁴

Alexsam failed to meet this standard for two reasons. *First*, this Court has well-established that “there can be no actual reduction to practice if the constructed embodiment or performed process lacks an element . . . or uses an equivalent of that element.”¹⁴⁵ As explained above, Alexsam failed to introduce any corroboration that the MCI/Meijer phone card system included the elements of (1) using unmodified POS terminals, (2) transmitting an activation amount from the POS terminal, or (3) a gift card.

Second, under this Court’s precedent, “[p]roof of actual reduction to practice requires more than theoretical capability.”¹⁴⁶ Alexsam did not introduce any transaction records or other documents at trial showing that the testing of the

¹⁴² See *Eaton v. Evans*, 204 F.3d 1094, 1097 (Fed. Cir. 2000); see also *Wetmore v. Quick*, 536 F.2d 937, 942 (C.C.P.A. 1976) (“proof of reduction to practice of an invention equivalent to that defined in the count is insufficient to support an award of priority of the count.”).

¹⁴³ *Wetmore*, 536 F.2d at 942.

¹⁴⁴ *Newkirk v. Lulejian*, 825 F.2d 1581, 1583 (Fed. Cir. 1987).

¹⁴⁵ *Eaton*, 204 F.3d at 1097.

¹⁴⁶ *Newkirk*, 825 F.2d at 1583.

Meier/MCI phone card system was successful, or that the system was used to process any transactions after the purported testing. Rather, Alexsam relied solely on witness testimony in support of its claim that the system was reduced to practice in October 1996. By contrast, Gap introduced detailed system configuration documents and transaction records establishing that the SVS system was used to conduct transactions from May 1997 forward.

And regardless of whether the testing of phone card transactions was successful, Alexsam was only able to elicit testimony that the MCI/Meijer prepaid phone card system was theoretically capable of activating gift cards.¹⁴⁷ Alexsam could not and did not introduce any evidence of a working system for POS activation of gift cards. Rather, PX-162—a document on which Alexsam relied—establishes that Mr. Dorf did not reduce a gift card embodiment to practice as part of the Meijer/MCI phone card system. In PX-162, dated November 11, 1996 (one month after the Meijer/MCI phone card testing), Mr. Dorf stated that he had not established a system for activating gift cards and was still researching possibilities for doing so.¹⁴⁸

¹⁴⁷ A01715.

¹⁴⁸ A02218 (“The exact method for establishing the communication link for an MCI Electronic Gift Certificate has not been finalized with Susan Hunter, although we did review the EGC with her.”).

The exact method for establishing the communication link for an MCI Electronic Gift Certificate has not been finalized with Susan Hunter, although we did review the EGC with her. It is suggested that ICS creates a managing hub collocated with MCI for this and I agree that this should be looked as one possibility. There are other suggestions that I have when you are ready.

Mr. Dorf went on to identify the extensive problems if MCI pursued development of a system for activating gift or multi-function cards, stating: “[t]he problem in having an MCI-EGC is one of communication and instant decrementing of cards which have multi-functions.”¹⁴⁹ This further shows that he lacked a workable solution at the time for processing gift cards or multi-function cards.¹⁵⁰

Accordingly, Alexsam failed to present legally sufficient evidence of any reduction to practice date before July 10, 1997, when Mr. Dorf applied for his first patent.

III. PATENTABLE SUBJECT MATTER

The asserted claims of Alexsam’s patents are also invalid under 35 U.S.C. § 101, because their subject matter is not patentable.¹⁵¹

In *Alexsam, Inc. v. IDT Corp.*, Judge Mayer wrote a dissenting opinion, which analyzed Alexsam’s ’608 patent under 35 U.S.C. § 101. Judge Mayer reasoned that the claims of the ’608 patent were unpatentable because they simply

¹⁴⁹ A2225.

¹⁵⁰ Claim 57 of the ’608 patent recites “a card” for use in a “multifunction card system.” A00396-97.

¹⁵¹ Gap did not allege invalidity under section 101 below, as the basis for its contention of invalidity under that section (the *Alice Corp.* decision and *IDT* opinion) did not exist until after the consolidated invalidity trial.

stated the abstract idea that it would be efficient to activate gift cards on existing hardware, and then implemented that idea using existing technology.¹⁵² As Judge Mayer explained, the Alexsam patents make clear that “no new technology is required” to operate the claimed system.¹⁵³

At trial in this case, the undisputed evidence showed that Mr. Dorf’s claimed invention is simply an arrangement of pre-existing computers and functions applied to a specific transaction type. To be sure, the documents Mr. Dorf relied on in support of his conception of the invention discuss using systems and concepts already being operated by a variety of different entities, including WorldDial, J.C. Penney, ANSI, MCI, Meijer, Michigan National Bank, and SSTi. Mr. Dorf conceded that every element of the MCI/Meijer phone card system, which he asserted practiced his invention, existed before his involvement, except for the processing hub.¹⁵⁴ Mr. Dorf also admitted that the concept of a processing hub was not new, as WorldDial had such a hub before Mr. Dorf became involved in the prepaid industry.¹⁵⁵ And Mr. Levenson, whose company developed and hosted the

¹⁵² *Alexsam, Inc. v. IDT Corp.*, 715 F.3d 1336, 1350 (Fed. Cir. 2013).

¹⁵³ *Id.* at 1349; *see also* A00385, ’608 patent at abstract (“The card system can be accessed from any existing point-of-sale (POS) device. The POS device treats the card as a credit or debit card and routes transaction data to a processing hub using the banking system.”).

¹⁵⁴ A01901-04.

¹⁵⁵ A01853.

processing hub used in the MCI/Meijer phone card system, also testified that it was not new. Mr. Levenson testified that his company had built the processing hub for a company called TNPI, and added some new modules to accommodate the MCI/Meijer phone card transactions.¹⁵⁶

A threshold issue in every patent case is whether the subject matter of the asserted claims is patentable under 35 U.S.C. § 101.¹⁵⁷ Recently, in *Alice Corp. Pty. Ltd. v. CLS Bank Int'l*, the Supreme Court held that an unpatentable abstract idea does not become patentable simply because it is implemented with computers.¹⁵⁸ The Court explained that claims that simply use routine computer functions—such as record-keeping, obtaining data, adjusting account balances, and issuing automated instructions—add nothing to computer technology.¹⁵⁹ Thus, Judge Mayer's dissent in *Alexsam, Inc. v. IDT Corp.* appears to represent the state

¹⁵⁶ A01673-74.

¹⁵⁷ *Bilski v. Kappos*, 130 S. Ct. 3218, 3225 (2010); *see Gametek LLC v. Zynga, Inc.*, No. CV-13-2546, 2014 U.S. Dist. LEXIS 58061, at *25 (N.D. Cal. Apr. 25, 2014) (dismissing case at the pleading stage where patent claimed abstract idea); *Clear with Computers, LLC v. Dick's Sporting Goods, Inc.*, No. 6:12-cv-674, 2014 U.S. Dist. LEXIS 32209, at *25 (E.D. Tex. Jan. 21, 2014) (same); *see also Every Penny Counts, Inc. v. Wells Fargo Bank, N.A.*, No. 8:11-cv-2826, 2014 U.S. Dist. Lexis 127369, at *14-15 (M.D. Fla. Sept. 11, 2014) (granting summary judgment because the patents-in-suit claimed an abstract idea).

¹⁵⁸ 134 S. Ct. 2347, 2358 (2014).

¹⁵⁹ *Id.* at 2359.

of the law post *Alice Corp.*, and Gap respectfully requests that this Court revisit the issue of whether the asserted claims are patentable under 35 U.S.C. § 101.

CONCLUSION

For the foregoing reasons, the Court should reverse the district court's denial of JMOL with respect to the anticipation of asserted claims 1, 34, 36, 37, 57, 58, 60, 62, and 65 of the '608 patent and claims 1, 2, and 19 of the '787 patent, and declare those claims invalid for anticipation by the SVS system. Alternatively, the Court should hold the patents-in-suit invalid under 35 U.S.C. § 101 and vacate the district court's final judgment.

Dated: September 12, 2014

Respectfully submitted,

/s/ Alan M. Fisch

Alan M. Fisch
R. William Sigler
Jeffrey M. Saltman
FISCH SIGLER LLP
5335 Wisconsin Avenue NW
Eighth Floor
Washington, DC 20015
(202) 362-3500

Peter Scoolidge
FISCH SIGLER LLP
432 Park Avenue South
Fourth Floor
New York, NY 10016
(212) 235-0440

*Attorneys for Defendants-Appellants
The Gap, Inc. and Direct Consumer
Services, LLC*

ADDENDUM

ORIGINAL

United States District Court
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION

ALEXSAM, INC.

v.

BEST BUY STORES LP	Cause No. 2:13-cv-2
BARNES & NOBLE, INC. AND BARNES & NOBLE MARKETING SERVICES, LLC	Cause No. 2:13-cv-3
THE GAP INC. AND DIRECT CONSUMER SERVICES, LLC	Cause No. 2:13-cv-4
J.C. PENNEY COMPANY, INC. AND J.C. PENNEY CORPORATION	Cause No. 2:13-cv-5
MCDONALD'S CORPORATION AND P2W, INC. NFP	Cause No. 2:13-cv-6
TOYS "R" US—DELAWARE, INC. AND TRU-SVC, LLC	Cause No. 2:13-cv-7
THE HOME DEPOT, U.S.A., INC. AND HOME DEPOT INCENTIVES, INC.	Cause No. 2:13-cv-8

JURY VERDICT FORM

Question No. 1

Do you find that Defendants proved, by clear and convincing evidence, that any of the following claims of the asserted patents are invalid as anticipated?

Answer "Yes" (invalid) or "No" (not invalid) as to each asserted claim in the space provided. Each space should be answered.

'608 Patent	"Yes" or "No"
Claim 1	No
Claim 34	No
Claim 36	No
Claim 37	No
Claim 57	No
Claim 58	No
Claim 60	No
Claim 62	No
Claim 65	No

'787 Patent	"Yes" or "No"
Claim 1	No
Claim 2	No
Claim 19	No

Please proceed to Question No. 2.

Question No. 2

Do you find that Defendants proved, by clear and convincing evidence, that the '608 or '787 patent is invalid for failure to name all of the inventors?

Answer "Yes" (invalid) or "No" (not invalid) as to each patent in the space provided. Each space should be answered.

Patent	"Yes" or "No"
'608 patent	✓ No
'787 patent	✓ No

The foreperson is requested to initial and date this document in the spaces provided below as the unanimous verdict of the jury.

May 3, 2013
DATE



FOREPERSON INITIAL

**United States District Court
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

Alexsam, Inc.

v.

Barnes & Noble, Inc., and

Barnes & Noble Marketing Services Corp.

Case No. 2:13-cv-3

v.

The Gap, Inc., and

Direct Consumer Services, LLC

Case No. 2:13-cv-4

ORDER ON RENEWED MOTIONS FOR JUDGMENT AS A MATTER OF LAW

Before the Court are Plaintiff Alexsam, Inc.'s Renewed Motion for Judgment as a Matter of Law (2:13-cv-3, Doc. No. 179; 2:13-cv-4, Doc. No. 179), Defendants' Renewed Motion for Judgment as a Matter of Law on Anticipation (2:13-cv-3, Doc. No. 184; 2:13-cv-4, Doc. No. 183), and Defendants' Renewed Motion for Judgment as a Matter of Law on Inventorship (2:13-cv-3, Doc. No. 185; 2:13-cv-4, Doc. No. 184). In the alternative, Defendants seek a new trial on the anticipation and inventorship issues. For the reasons stated below, the Court **GRANTS** Alexsam's motion and **DENIES** both of Defendants' motions.

I. BACKGROUND

On March 17, 2010, Alexsam filed suit against Defendants alleging that Defendants infringed U.S. Patent Nos. 6,000,608 (the '608 patent) and 6,189,787 (the '787 patent) both issued to Mr. Robert Dorf as the sole inventor. Alexsam accused Defendants' gift card activation system of infringing these patents. In response, Defendants contended that the patents were invalid as anticipated by the prior art and that the patents were invalid due to improper inventorship.

Alexsam originally filed its case against 15 defendants under a single case number, but the Court entered a *sua sponte* order severing the case into seven separate cases based on seven groups of defendants (*see* 2:10-cv-093, Doc. No. 371). The above-numbered and -styled cases were consolidated under the lead case, Alexsam, Inc. v. Best Buy Stores LP, for a single invalidity trial (*see* Consolidation Order, 2:13-cv-2, Doc. No. 61). This matter was tried to a jury beginning on April 29, 2013. On May 3, 2013, the jury returned a verdict finding that none of the asserted claims were invalid (*see* Jury Verdict Form, 2:13-cv-3, Doc. No. 221).

II. LEGAL STANDARD

A motion for judgment as a matter of law is a procedural issue not unique to patent law; therefore, the motion is reviewed under the law of the regional circuit. *Summit Tech., Inc. v. Nidek Co., Ltd.*, 363 F.3d 1219, 1223 (Fed. Cir. 2004). Judgment as a matter of law is justified where “a party has been fully heard on an issue during a jury trial and the court finds that a reasonable jury would not have a legally sufficient evidentiary basis to find for the party on that issue.” Fed. R. Civ. P. 50(a)(1). In addressing a motion for judgment as a matter of law, the Court must “review all of the evidence in the record, draw all reasonable inferences in favor of the nonmoving party, and may not make credibility determinations or weigh the evidence.” *Ellis v. Weasler Eng’g Inc.*, 258 F.3d 326, 337 (5th Cir. 2001) (citing *Reeves v. Sanderson Plumbing Prods., Inc.*, 530 U.S. 133, 150 (2000)). The basis for this perspective is that “[c]redibility determinations, the weighing of the evidence, and the drawing of legitimate inferences from the facts are jury functions, not those of a judge.” *Anderson v. Liberty Lobby, Inc.*, 477 U.S. 242, 255 (1986); *see also Reeves*, 530 U.S. at 150.

As such, a motion for judgment as a matter of law should be granted “only when ‘the facts and inferences point so strongly in favor of the movant that a rational jury could not reach a

contrary verdict.”” *Allstate Ins. Co. v. Receivable Fin. Co., L.L.C.*, 501 F.3d 398, 405 (5th Cir. 2007) (quoting *Pineda v. United Parcel Serv., Inc.*, 360 F.3d 483, 486 (5th Cir. 2004)). The court affords “great deference to a jury’s verdict” and a judgment as a matter of law is only appropriate “when viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of one party that the court believes that reasonable jurors could not arrive at any contrary conclusion.” *Dresser-Rand Co. v. Virtual Automation Inc.*, 361 F.3d 831, 838 (5th Cir. 2004).

In regard to granting a new trial, the Court, in its discretion, may grant a new trial after a jury trial “for any reason for which a new trial has heretofore been granted in an action at law in federal court.” Fed. R. Civ. P. 59(a). As with motions for judgment as a matter of law, motions for new trial are determined by the law of the regional circuit. *z4 Techs., Inc. v. Microsoft Corp.*, 507 F.3d 1340, 1347 (Fed. Cir. 2007). Grounds for a new trial include that “the verdict is against the weight of the evidence, the damages awarded are excessive, the trial was unfair, or prejudicial error was committed in its course.” *Smith v. Transworld Drilling Co.*, 773 F.2d 610, 613 (5th Cir. 1985). The Court must affirm the jury’s verdict unless, in viewing the evidence in the light most favorable to the verdict, the evidence points so strongly and overwhelmingly in favor of the other party that reasonable individuals could not arrive at a contrary conclusion. *Pryor v. Trane Co.*, 138 F.3d 1024, 1026 (5th Cir. 1998).

III. DISCUSSION

A. *Alexsam’s Motion for Judgment as a Matter of Law*

At the close of evidence, Alexsam moved for judgment as a matter of law on six bases: (1) anticipation by the alleged Stored Value Solutions (“SVS”) systems; (2) anticipation by the alleged WorldDial systems (3) prior art that was disclosed in Defendants’ 35 U.S.C. § 282 notice

but to which no evidence was presented at trial; (4) obviousness; (5) inventorship; and (6) written description under 35 U.S.C. § 112 (2:13-cv-2, Doc. No. 251 at 103–06). The Court denied all motions (2:13-cv-2, Doc. No. 251 at 108).

Alexsam renews its motion for judgment as a matter of law on three grounds: (1) prior art cited in Defendants' 35 U.S.C. § 282 notice but to which no evidence was presented at trial (namely Levine, Stimson, Lorsch and Muehlberger references); (2) obviousness; and (3) written description.¹ Defendants do not oppose Alexsam's motion to the extent that entry of judgment is specifically limited to the three particular grounds identified in the motion, and binds only the named Defendants. They are opposed to the motion to the extent that the motion encompasses third-party card processors like SVS and Blackhawk Network, Inc. ("Blackhawk") (Doc. No. 233 at 3). Alexsam agrees that "the Court may enter judgment as a matter of law as to the [named] Defendants" but "reserves the right to argue in future cases that this judgment should apply to other parties under the prevailing law of res judicata and collateral estoppel" (Doc. No. 237 at 1–2). Accordingly, the Court will grant Alexsam's motion, but declines to offer what would be an advisory opinion on its effect on third parties that did not participate in the invalidity trial.

B. Defendants' Motion for Judgment as a Matter of Law

At the close of evidence, Defendants collectively moved for judgment as a matter of law that all of the asserted claims of the Alexsam patents were invalid as anticipated by the SVS system or the WorldDial system (2:13-cv-2, Doc. No. 61 at 100–02). Defendants also moved for judgment as a matter of law regarding inventorship, and argued that Mr. Jay Levenson of SSTi should have been listed as a co-inventor on the patents in suit (2:13-cv-2, Doc. No. 251 at 102). The Court denied both motions (2:13-cv-2, Doc. No. 251 at 103). Defendants have

¹ The other three issues were submitted to the jury, which resulted in a verdict in favor of Alexsam.

moved for renewed motions for judgment as a matter of law on both grounds (2:13-cv-3, Doc. Nos. 184, 185; 2:13-cv-4, Doc. Nos. 183, 184).

1. Anticipation

Anticipation requires “a single prior art reference [that] discloses each and every element of a claimed invention.” *K-Tec, Inc. v. Vita-Mix Corp.*, 696 F.3d 1364, 1377 (Fed. Cir. 2012). Under 35 U.S.C. § 102(g)(2), “if a patentee’s invention has been made by another, prior inventor who has not abandoned, suppressed, or concealed the invention, § 102(g) will invalidate that patent.” *Apotex USA, Inc. v. Merck & Co.*, 254 F.3d 1031, 1035 (Fed. Cir. 2001). “[O]nce a challenger (the alleged infringer) has introduced sufficient evidence to put at issue whether there is prior art alleged to anticipate the claims being asserted, prior art that is dated earlier than the apparent effective date of the asserted patent claim, the patentee has the burden of going forward with evidence and argument to the contrary.” *Tech. Licensing Corp. v. Videotek, Inc.*, 545 F.3d 1316, 1329 (Fed. Cir. 2008). A patentee may meet this burden by demonstrating “(1) that it reduced its invention [to practice] first,” or “(2) it was the first party to conceive of the invention and then exercised reasonable diligence in reducing that invention to practice.” *Solvay S.A. v. Honeywell Int’l, Inc.*, 622 F.3d 1367, 1376 (Fed. Cir. 2010).

Conception is “the formation in the mind of the inventor, of a definite and permanent idea of the complete and operative invention, as it is hereafter to be applied in practice.” *Solvay*, 622 F.3d at 1377. Conception is “complete only when the idea is so clearly defined in the inventor’s mind that only ordinary skill would be necessary to reduce the invention to practice, without extensive research or experimentation, and that an idea is definite and permanent when the inventor has a specific, settled idea, a particular solution to the problem at hand, not just a general goal or research plan he hopes to pursue.” *Dawson v. Dawson*, 710 F. 3d 1347, 1352

(Fed. Cir. 2013) (quoting *Burroughs Wellcome Co. v. Barr Labs., Inc.*, 40 F.3d 1223, 1228 (Fed. Cir. 1994)).

The jury was so instructed on the applicable law (2:13-cv-2, Doc. No. 220 at 14–16). Defendants did not object to the relevant portion of the jury instructions (2:13-cv-2, Doc. No. 251 at 96). And “juries are presumed to follow their instructions.” *Baisden v. I'm Ready Prods., Inc.*, 693 F.3d 491, 507 (5th Cir. 2012) *cert. denied*, 133 S. Ct. 1585 (2013) (quoting *Zafiro v. United States*, 506 U.S. 534, 540 (1993)). “Anticipation is a factual determination that is reviewed for substantial evidence when decided by a jury.” *Koito Mfg. Co., Ltd. v. Turn-Key-Tech, LLC*, 381 F.3d 1142, 1149 (Fed. Cir. 2004).

After reviewing the record, the Court finds that there was substantial evidence to support the jury’s finding that the patents in suit were not anticipated by the alleged SVS systems. The jury could have found that Defendants did not introduce sufficient evidence to put at issue whether the SVS systems disclose each and every element of the asserted claims, thus never shifting the burden to Mr. Dorf to demonstrate an earlier invention date. Alternatively, the jury could have found that Mr. Dorf reduced his invention to practice first or that he was the first to conceive and then exercised reasonable diligence in reducing that invention to practice. *See Solvay*, 622 F.3d at 1376. There was substantial evidence to support such finding by the jury. Accordingly, reasonable and impartial minds could have reached a verdict that the patents in suit are not invalid as being anticipated by the SVS systems. *See Argo v. Woods*, 399 F. App’x 1, 3 (5th Cir. 2010) (explaining that the standard for determining a “Rule 50(b) motion for judgment as a matter of law following a jury verdict is whether ‘the state of proof is such that reasonable and impartial minds could reach the conclusion the jury expressed in its verdict’” (citing *Am. Home Assurance Co. v. United Space Alliance, LLC*, 378 F.3d 482, 487 (5th Cir. 2004))).

2. *Inventorship*

“There is a presumption that the inventors named on an issued patent are correct, so misjoinder of inventors must be proven by clear and convincing evidence.” *Id.* “The burden of showing misjoinder or nonjoinder of inventors is a heavy one.” *Hess v. Advanced Cardiovascular Sys., Inc.*, 106 F.3d 976, 980 (Fed.Cir.1997) (internal quotations omitted).

To be a joint inventor, one must “(1) contribute in some significant manner to the conception or reduction to practice of the invention, (2) make a contribution to the claimed invention that is not insignificant in quality, when that contribution is measured against the dimension of the full invention, and (3) do more than merely explain to the real inventors well-known concepts and/or the current state of the art.” *Pannu v. Iolab Corp.*, 155 F.3d 1344, 1351 (Fed. Cir. 1998); *see Nartron Corp. v. Schukra U.S.A. Inc.*, 558 F.3d 1352, 1357 (Fed. Cir. 2009)

Again, the jury was so instructed on the applicable law, and (2:13-cv-2, Doc. No. 220 at 20–21), and Defendant did not object to the relevant portion of the jury instructions (2:13-cv-2, Doc. No. 251 at 96). But “[i]nventorship is a question of law with factual underpinnings.” *BJ Servs. Co. v. Halliburton Energy Servs.*, 338 F.3d 1368, 1373 (Fed. Cir. 2003). Thus, when reviewing the jury’s verdict on inventorship, the Court reviews the jury’s “conclusions on … a question of law[] without deference, and the underlying findings of fact, whether explicit or implicit within the verdict, for substantial evidence.” *See Koito Mfg.*, 381 F.3d at 1149 (quoting *LNP Eng’g Plastics, Inc. v. Miller Waste Mills, Inc.*, 275 F.3d 1347, 1353 (Fed. Cir. 2001)); *see also Inline Connection Corp. v. EarthLink, Inc.*, 684 F. Supp. 2d 496, 503 (D. Del. 2010).

To conclude that the patents are not invalid on the inventorship issue, the jury implicitly must have found that Mr. Levenson or others at SSTi did not make a significant contribution to the conception of one or more of the claims of the patent. Upon a review of the record, the Court

finds that there was substantial evidence to support such finding. Accordingly, reasonable and impartial minds could have reached such a verdict that the patents are not invalid for failure to identify all inventors. *See Argo*, 399 F. App'x at 3.

IV. CONCLUSION

For the foregoing reasons, Plaintiff Alexsam, Inc.'s Renewed Motion for Judgment as a Matter of Law (2:13-cv-3, Doc. No. 179; 2:13-cv-4, Doc. No. 179) is **GRANTED** and Defendants' Renewed Motions for Judgment as a Matter of Law or, in the alternative, Motion for a New Trial (2:13-cv-3, Doc. Nos. 184, 185; 2:13-cv-4, Doc. Nos. 183, 184) are **DENIED**.

It is SO ORDERED.

SIGNED this 5th day of March, 2014.



MICHAEL H. SCHNEIDER
UNITED STATES DISTRICT JUDGE

**United States District Court
EASTERN DISTRICT OF TEXAS
MARSHALL DIVISION**

Alexsam, Inc.

v.

Barnes & Noble, Inc., and

Barnes & Noble Marketing Services Corp.

Case No. 2:13-cv-3

v.

The Gap, Inc., and

Direct Consumer Services, LLC

Case No. 2:13-cv-4

FINAL JUDGMENT

Having resolved all outstanding issues pending before the Court, it is **ORDERED**,
ADJUDGED, and DECREED that final judgment be entered in these cases.

All relief not previously granted is hereby **DENIED**.

It is SO ORDERED.

SIGNED this 14th day of May, 2014.



MICHAEL H. SCHNEIDER
UNITED STATES DISTRICT JUDGE



US006000608A

United States Patent [19]

Dorf

[11] Patent Number: **6,000,608**
 [45] Date of Patent: **Dec. 14, 1999**

[54] MULTIFUNCTION CARD SYSTEM

[76] Inventor: **Robert E. Dorf**, 904 Bromley Way,
 Raleigh, N.C. 27615

[21] Appl. No.: **08/891,261**

[22] Filed: **Jul. 10, 1997**

[51] Int. Cl.⁶ **G06K 5/00**

[52] U.S. Cl. **235/380; 235/375**

[58] Field of Search **235/380, 375,
 235/381, 382, 492, 493; 902/1, 2, 8, 10,
 12, 22, 24, 25, 26, 27**

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Primary Examiner—Thien Minh Le

Assistant Examiner—Daniel Felten

Attorney, Agent, or Firm—Stroock & Stroock & Lavan LLP

ABSTRACT

Disclosed is a multifunction card system which provides a multifunction card capable of serving as a prepaid phone card, a debit card, a loyalty card, and a medical information card. Each card has an identification number comprising a bank identification number which assists in establishing communications links. The card system can be accessed from any existing point-of-sale (POS) device. The POS device treats the card as a credit or debit card and routes transaction data to a processing hub using the banking system. The processing hub coordinates the various databases corresponding to the various functions of the card.

66 Claims, 2 Drawing Sheets

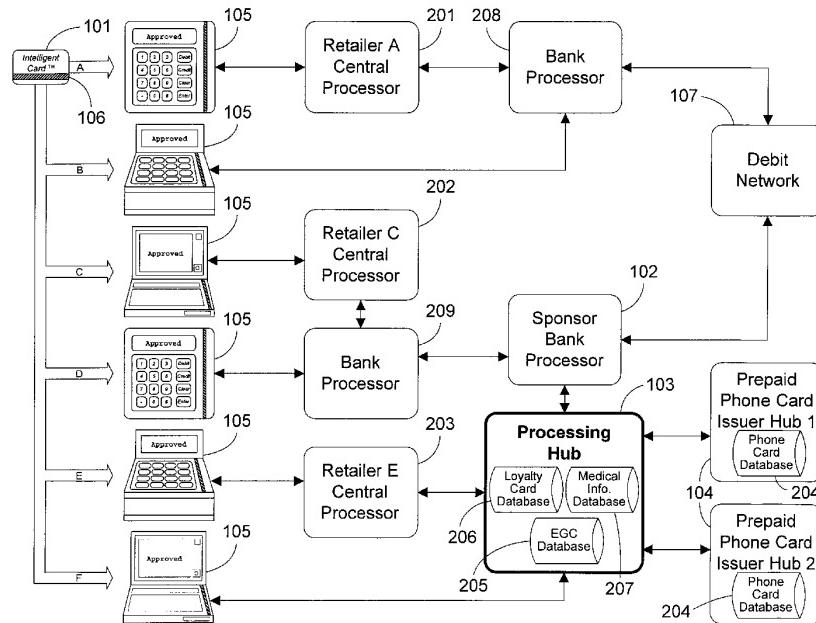
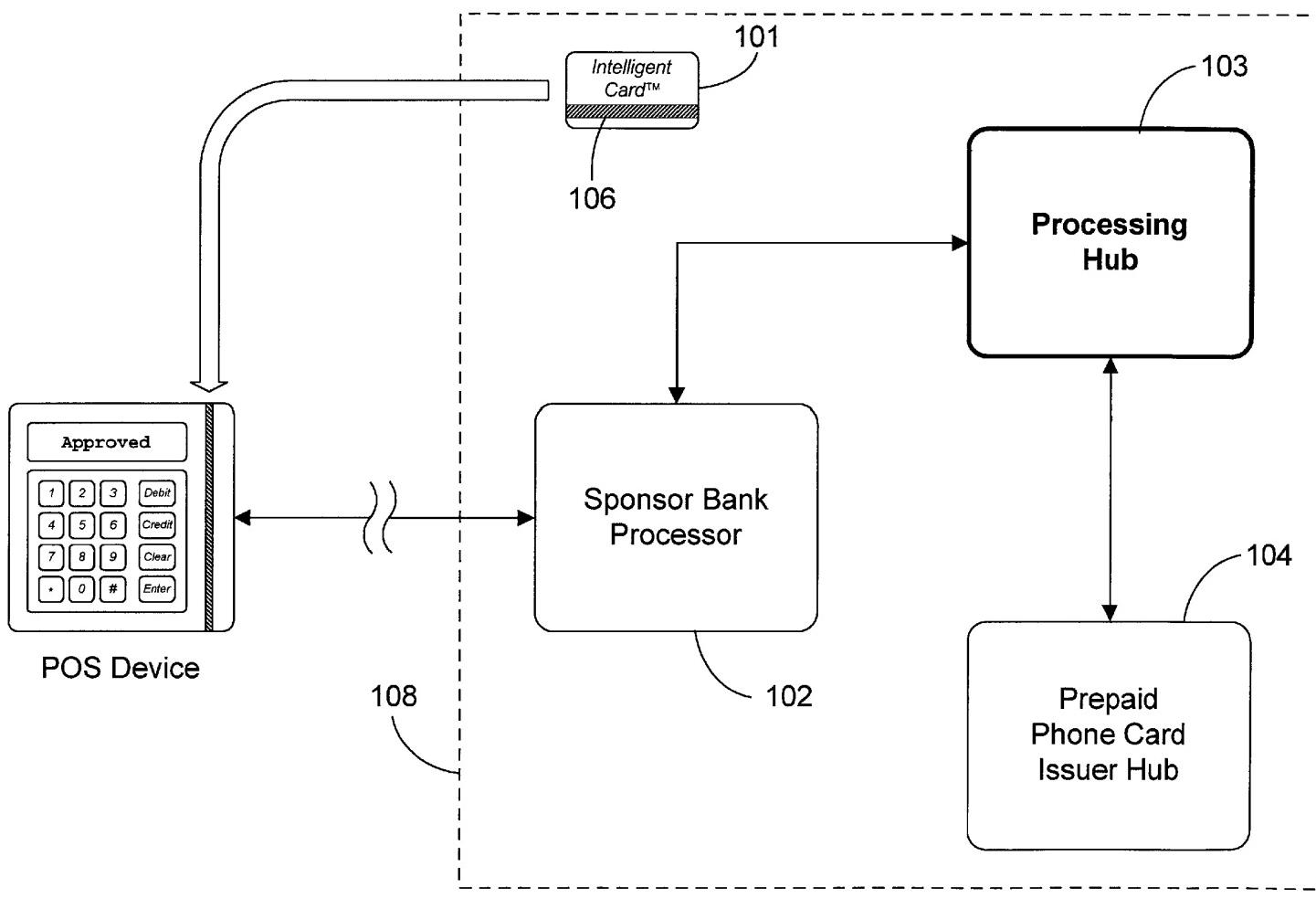


FIG. 1



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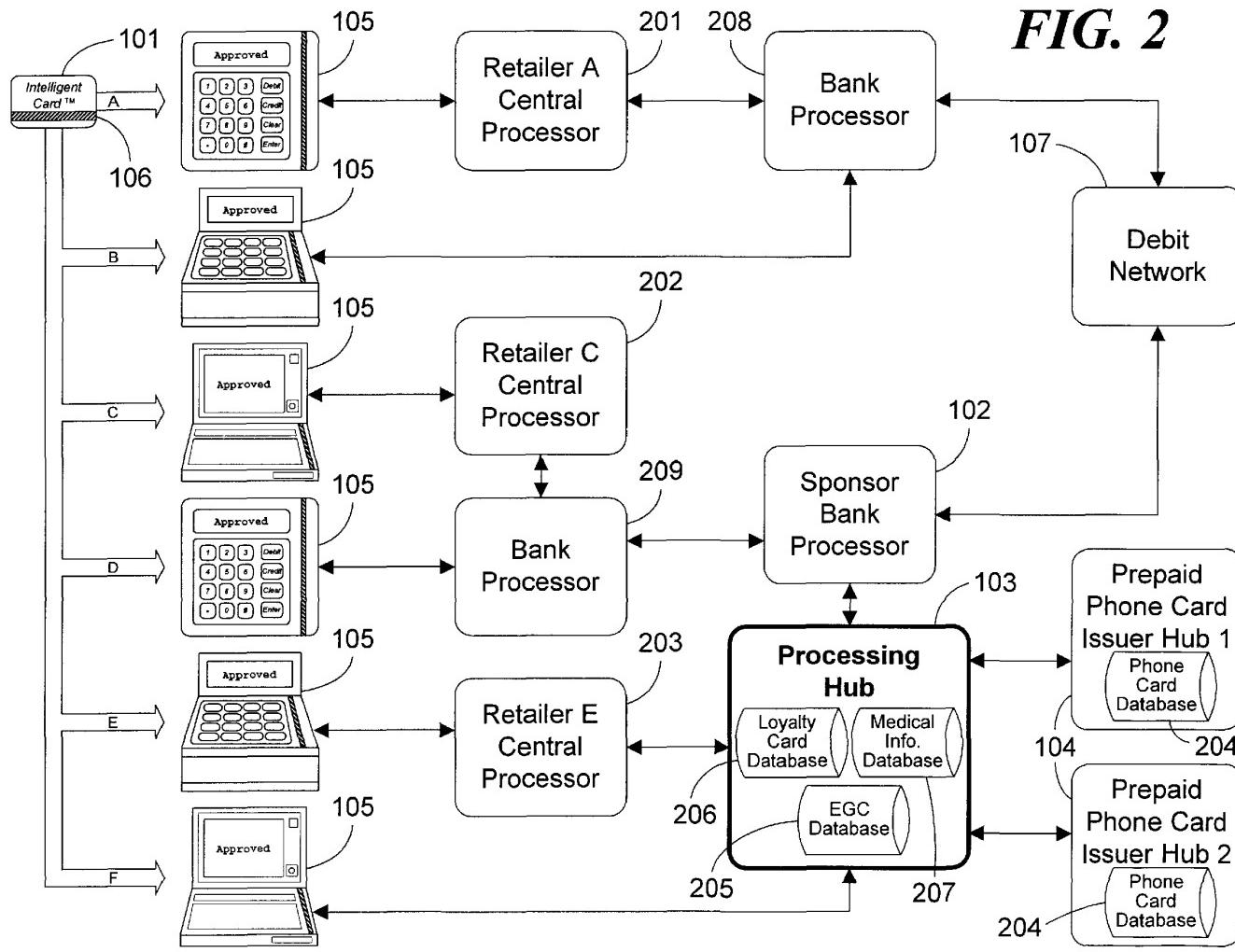
U.S. Patent

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FIG. 2



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1**MULTIFUNCTION CARD SYSTEM****FIELD OF THE INVENTION**

The present invention relates generally to debit card systems, both bank-issued and non-bank-issued, and more particularly to a multifunction card system that can be accessed by a variety of standard point-of-sale devices, by phone, by fax, or over the Internet.

BACKGROUND OF THE INVENTION**I. Debit Cards**

Banking institutions often issue debit cards to their customers to give them access to funds from their savings or checking accounts. Such a debit card might be an on-line debit card or an off-line debit card. On-line debit cards, often referred to as automatic teller machine (ATM) cards, require a personal identification number (PIN) to be entered into an ATM or point-of-sale (POS) device in order to authorize the transaction. Once completed, the transaction clears the bank account immediately. Off-line debit cards function like credit cards, and usually carry the VISA® or MasterCard® logo. A retailer processes the card like a credit card and the customer signs a receipt. The funds then clear the bank account in one to three days.

While such debit cards are extremely useful and provide convenience for bank depositors, they generally do not serve a plurality of functions. Therefore, there is a need in the art for a debit/credit card capable of performing a plurality of functions, such as an electronic gift certificate card, a prepaid phone card, and a loyalty card, all in a real-time secure environment. There is also a need in the art for a system which can provide a card substitute for traveler checks and money orders which can be accepted by any POS device or ATM for financial transactions. Further, there is a need for a processing center which can manage such a multifunction card system.

II. Prepaid Phone Cards

Prepaid card systems are used by the telephone industry to allow customers to repurchase long distance calling time. Such cards are typically purchased in predefined value increments. The card provides the customer with an amount of long distance calling time equivalent to the predefined value increment.

Each of the cards has an identification number printed or magnetically stored on it. The identification number is also stored in a record in a database maintained by the card issuer. This record also stores the predefined value of the card. When the cards are sent to the retail location from which they will be sold, the corresponding records in the database are activated, thus allowing the card to be used immediately by a customer. To use the card, the customer dials a toll free number to access the card issuer's system, enters the identification number, and then makes the desired long-distance call. During the call, the value of the card in the database is decremented accordingly. When the value of the card is exhausted, the call terminates. If the customer ends the call before the value of the card is exhausted, the remaining value may be used for additional calls. Once the entire value of the card has been used, it is discarded.

These prior art prepaid phone card systems have several disadvantages. First, since the cards are active while on the shelf in the retail location, they may be stolen by a thief and easily used. Second, the prior art systems do not allow the customer to purchase a card having any given value, nor do they allow the customer to recharge the value of the cards once they are depleted.

One way to address some of the drawbacks of prior art prepaid phone card systems would be to install activation

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terminals unique to the prepaid card issuer. This is referred to as a "closed system." U.S. Pat. No. 5,577,109 to Stimson et al. discloses such a closed system. In the Stimson system, the cards are not preactivated. Each of the retail locations

from which cards are to be sold is provided with a dedicated activation terminal which allows the retail operator to set the value of the card at the time of the sale. The activation terminal connects to the card issuer's system to pass along the value amount and to request activation of the card.

Depleted cards can be recharged in the same manner as they are sold. A serious disadvantage of the Stimson system is that it requires single-function dedicated hardware to be installed in each retail location, resulting in a very inflexible and expensive system.

Thus, there is a need in the art for a prepaid phone card activating system which is easily and inexpensively deployed, and which allows cards to be purchased in varying amounts and to be recharged without requiring the use of a closed system to handle the transactions.

III. Loyalty Cards

Loyalty cards are used to reward consumers for purchasing goods or services. For instance, airlines commonly reward frequent fliers with points for each mile flown with that airline. When the consumer accumulates a certain number of points, he or she is rewarded with free or discounted air fare. In this and other similar systems, the loyalty card issuer directly participates in the sale transaction. Such systems, however, do not allow a manufacturer of a product which is sold by an unrelated retailer to immediately reward the ultimate purchaser of the product with loyalty points. Since the manufacturer does not know of the ultimate sale until much later, if ever, it is difficult for such a manufacturer to conduct a loyalty program. Thus, there is presently no method for creating a product-specific loyalty card as opposed to a retailer-specific card. Nor is there a system for communicating loyalty data to databases not located at the retail establishment.

Furthermore, prior art loyalty programs generally do not credit the consumer's loyalty account in real-time as a purchase transaction takes place. Therefore, the consumer is unable to enjoy the benefits of their added loyalty points immediately. Finally, prior art loyalty programs commonly require significant startup efforts and expenses before the system is operational. Therefore, there is a need in the art for a real-time loyalty card system which is easily deployed, and which is capable of providing a product-specific loyalty card as well as a retailer-specific card. There is also a need for a system which can reward customers automatically for their loyalty and communicate this loyalty reward to databases other than at a retail location.

IV. Information Retrieval

Often, it is important to access certain types of information in a very fast and convenient manner. For example, a person's medical history can be extremely important in assessing the propriety of certain medical procedures during a medical emergency. Presently, in order to obtain a patient's medical history, the patient or his or her doctor must request the appropriate files from the patient's previous doctor(s). It often takes a number of days to receive the requested information. In a medical emergency, this delay is often far too long. Thus, there is a need for patients to have control over their own medical history data. Further, there is a need for this data to be instantly available to the patient, or the patient's doctor if the patient is incapacitated.

V. Multifunction Card

Due to the proliferation of various types of cards (e.g., credit/debit, long-distance calling, loyalty, etc.) over the last

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couple of decades, it has become increasingly difficult to keep track of each individual card. There is a need for a card system which can serve a number of functions, thus allowing the consumer to have one card which may act as their card for financial transactions, long-distance telephone calls, loyalty information, and medical information.

SUMMARY OF THE INVENTION

The present invention solves the problems associated with prior art card systems by providing an improved multifunction card system. The multifunction card system comprises at least one electronic gift certificate card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving electronic gift certificate card activation data from an existing standard retail point-of-sale device when the electronic gift certificate card is swiped through the point-of-sale device, the electronic gift certificate card activation data comprising the unique identification number of the electronic gift certificate card and an electronic gift certificate activation amount; means for activating an account corresponding to the electronic gift certificate card with a value equal to the electronic gift certificate activation amount; and means for allowing a user of the electronic gift certificate card to purchase goods having a value up to the electronic gift certificate activation amount.

The multifunction card system further comprises at least one phone card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving phone card activation data from an existing standard retail point-of-sale device when the phone card is swiped through the point-of-sale device, the phone card activation data comprising the unique identification number of the phone card and a phone card activation amount; means for activating an account corresponding to the phone card with a value equal to the phone card activation amount; and means for allowing a user of the phone card to obtain long distance telephone calling time having a value up to the phone card activation amount.

In a preferred embodiment, the multifunction card system further comprises at least one loyalty card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving loyalty data from an existing standard retail point-of-sale device when the loyalty card is swiped through the point-of-sale device, the loyalty data comprising the unique identification number of the loyalty card and a purchase amount; and means for crediting an account corresponding to the loyalty card with a number of loyalty points proportional to the purchase amount.

Optionally, the multifunction card system of the present invention may also comprise at least one medical information card having a unique identification number associated with it, the medical information card belonging to a patient; a database comprising at least one record corresponding to the medical information card, the record containing medical history information about the patient; and means for allowing an authorized requester to obtain the medical history information about the patient using the unique identification number associated with the medical information card.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be more fully understood by reference to the following detailed description when con-

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sidered in conjunction with the following drawings wherein like reference numbers denote the same or similar portions or processes shown throughout the several Figures, in which:

5 FIG. 1 is a block diagram of the multifunction card system of the present invention; and

10 FIG. 2 is block diagram demonstrating the various ways in which a retail point-of-sale device might connect to the multifunction card system of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

15 The present invention is a multifunction card system which allows for the activation of prepaid phone cards and the use of Electronic Gift Certificate™ cards, loyalty cards, debit cards, and medical information cards. Further, the system provides for the immediate linkage of these various functions. FIG. 1 illustrates the multifunction card system **108** of the present invention. The system **108** comprises a plurality of cards **101**, a sponsor bank processor **102**, and a processing hub **103**, which serves as the nerve center of the system **108**. If the system **108** is to provide prepaid phone cards, it will also include a prepaid phone card issuer hub **104** maintained by a prepaid phone card issuer. In order to achieve the desired functionality, the system **108** uses existing banking networks in a unique and novel way to gain access to virtually all existing retail point-of-sale (POS) devices **105**. These devices **105** include stand-alone POS terminals, cash registers with POS interfacing, computers with POS interfacing, and other similar devices which can be used to access the banking system. As used herein, POS device includes all such devices, whether data entry is effected by swiping a card through the device or by manual entry.

20 To access these POS devices, the operator of the system **108** must apply for and obtain a Bank Identification Number (BIN) from the American Banking Association. The BIN serves as a unique identifier of the multifunction card system **108** within the banking network. The BIN is encoded on a magnetic strip **106** on each card **101** in the system **108** as a part of the card's identification number. Alternatively or additionally, the BIN and identification number could be encoded as a bar code, embossed on the surface on the card **101** in numerals for manual entry, or provided by any other means known in the art.

25 Preferably, the BIN's first digit will be the same number as the first BIN digit used by a popular card issuer. This is because POS devices are preprogrammed to recognize only certain types of cards, such as those issued by VISA® and MasterCard®, American Express®, etc. As a rule, these POS devices must be reprogrammed before they will accept a new type of card. However, since POS devices already recognize cards issued by these popular card issuers, a new type of card will also be recognized by such devices if it has a BIN that begins with the same number used by one of the popular card issuers. Since VISA® and MasterCard® are the most universally accepted cards, the BIN of the multifunction card system **108** of the present invention preferably **30** will begin with the same number used by either VISA® or MasterCard® (i.e., "4" or "5", respectively). By using one of these numbers, the card **101** will be recognized by almost all existing POS devices **105** as a debit or credit card, and its transactions will be automatically routed by the banking system to the correct destination. This occurs regardless of **35** the type of POS device **105** used, since all such devices are designed to interface with the banking network. Although **40** **45**

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the BIN number will preferably begin with a "4" or "5", it may begin with any number that is recognized by POS devices **105**.

The operator of the system **108** should also have a sponsoring bank whose bank processor **102** will serve as the link between the processing hub **103** and the banking network. Alternatively, the operator of the system **108** could itself be a banking institution.

By providing a means for any given POS device **105** to connect to the processing hub **103**, the system **108** allows a retailer to remotely activate or add value or loyalty data to a system card. The method by which this occurs is set forth more fully below in the context of the various functions of the card.

I. Prepaid Phone Card

A plurality of long distance service providers may contract with the operator of the multifunction card system **108** to issue prepaid phone cards **101** for use in the system **108**. Alternatively, a long distance service provider may itself be the operator of the system **108**. The long distance service provider will be referred to as a phone card issuer. A phone card issuer provides prepaid phone cards **101** to retailers who sell the cards **101** at their retail locations. Until activated, the cards **101** have no intrinsic value associated with them. Therefore, they may be placed on store shelves in easily accessible areas without the fear of losses due to theft. When a customer wishes to purchase or recharge one of the cards **101**, he or she informs the sales clerk of the monetary amount desired. Depending upon the system chosen by the particular phone card issuer, this amount may be one of a finite number of predefined amount increments, or may be selected by the customer. The clerk swipes the card **101** through the POS device **105**. Depending upon the amount of customization that has occurred at the retailer's location, there are a number of ways in which the POS device **105** may connect to the system's **108** processing hub **103** to carry out the transaction. FIG. 2 illustrates several of these methods.

The first two methods shown in FIG. 2, methods A and B, are the most easily deployed, but cost the most on a per-transaction basis. To route information to the processing hub **103**, these methods employ the debit network **107** used by banking institutions. The retailer in method A (retailer A) has a central processor which controls each of its POS devices **105** and connects them to a processor **208** at a bank chosen by the retailer. Retailer B's POS device **105** connects directly to the bank processor **208**. Otherwise, the two methods are the same.

Banking regulations currently require that any transaction taking place over the debit network **107** must result in an actual transfer of funds. Since this phone card activation transaction is not a typical debit transaction, it is presently desirable to keep the official amount of the transaction to a minimum, yet still comply with the banking regulations. Therefore, regardless of the actual sale amount, the clerk enters a nominal transaction amount. In a preferred embodiment, the nominal transaction amount is keyed to the actual transaction amount (e.g., \$0.01 nominal=\$10.00 actual, \$0.02 nominal=\$20.00 actual, etc.). Therefore, the actual transaction amount can be ascertained from the nominal amount. In this embodiment, the card could only be activated or recharged in predefined increments. If the card is to have a fixed value, the activation amount could also be encoded on the magnetic strip **106** of the card **101** as part of the card's identification number.

In an alternate embodiment, the card could be activated or recharged in any amount desired by the customer. In this

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case, the nominal transaction amount would be a fixed value, such as \$0.01. Once the nominal transaction amount is entered, the actual sale amount could then be entered on the PIN pad of the POS device **105** instead of the personal identification number (PIN) that would normally be entered when using a debit card. By entering the actual sale amount in this manner, it can be any desired amount.

In either case, before it transmits the data, the POS device **105** encrypts the information to be sent. This information includes the identification number read from the card's magnetic strip **106**, the nominal transaction amount, and the actual sale amount if it was entered into the PIN pad. The system **108** contains software which will decrypt and translate the data upon receipt. Once the encryption has taken place, the POS device **105** transmits the data either directly or via the central processor **201** to the bank processor **208**. The bank processor **208** receives the data and transmits it over the debit network **107**. The debit network **107** then forwards the data to the sponsoring bank's processor **102**. As mentioned earlier, the sponsoring bank is one which has agreed to operate as a link between the debit network **107** and the processing hub **103**.

As mentioned earlier, banking regulations as they currently exist require that transactions taking place over the debit network must result in a transfer of funds. Preferably, in order to comply with the banking regulations, the sponsoring bank transfers the nominal amount (e.g., \$0.01) from one account belonging to the retailer to another account also belonging to the retailer. The bank processor **102** then forwards the data from the POS device **105** to the processing hub **103**.

In methods C and D, the retailers' central processor **202** or POS device **105**, respectively, again connect to a processor **209** at a retailer-chosen bank. By agreement between the operator of the multifunction card system **108** and the retailer-chosen bank, this bank processor **209** is programmed to recognize the multifunction card system's BIN and to forward the system's transactions directly to the sponsoring bank's processor **102** rather than using the debit network **107**. Since the debit network **107** is not used, it is not necessary to use a nominal sale amount, although such a method would nonetheless work and might be preferred by the retailer for security and bookkeeping purposes. The system **108** could instead be programmed to prompt the clerk for the appropriate information. As in methods A and B, the sponsor bank processor **102** forwards the necessary information to the processing hub **103**. Although methods C and D are more efficient than methods A and B on a per transaction basis, they require some customization at the retailer location to cause the retailer to connect to a bank processor **209** that recognizes the system's BIN.

Methods E and F are the least costly methods of connecting to the processing hub **103** (i.e., directly from the retailer's central processor **203** or from the POS device **105** itself). The connection may be made via a toll-free telephone line, a dedicated phone line, over the Internet, or any other standard communication means. Again, however, these methods require the most customization at the retailer location to cause the retailer's system to recognize the multifunction card system's cards and to route their transactions directly to the processing hub **103**. Such customization, however, still does not require reprogramming of the POS devices themselves. The connection method chosen may be adjusted to fit the individual retailer's needs.

Regardless of the method used, the data will eventually arrive at the processing hub **103**. If the transmission has taken place over the debit network **107**, the data must be

decrypted using equipment well known in the art for decrypting debit transaction data. Once the data is received and, if necessary, decrypted, the processing hub **103** recognizes the identification number of the card as being associated with a particular prepaid phone card issuer. Next, a security check is performed to verify that this transaction is originating from a retailer that is authorized to sell the prepaid phone cards. If the transaction is originating from an authorized retailer, the transaction will proceed. The processing hub **103** will then forward the card identification number, retail store and POS device information, and amount information to the issuer hub **104** maintained by the prepaid phone card issuer. The issuer hub **104** contains one or more phone card databases **204** which store information about each phone card. When the issuer hub **104** receives the data from the processing hub **103**, it activates the record in the phone card database **204** having the same identification number as the card **101**. The value field in the record is then increased by the appropriate purchased amount. If the card is of a fixed value, the record is simply activated. The issuer hub **104** then returns an authorization number which travels back along the same path to the originating POS device **105**. The customer may then dial the prepaid phone card issuer's toll free number, enter the card number and any required PIN, and obtain long distance calling time having a value up to the value of the card stored in the phone card database **204**.

Each activation or recharge transaction is recorded by the system **108**. At the end of the day, a report is preferably created for each card issuer and retail location so that their accounts can be reconciled. Transfer of funds between these parties may then take place by any commercially acceptable means.

II. Electronic Gift Certificate™ Card

The multifunction card system **108** of the present invention is also capable of providing an Electronic Gift Certificate™ (EGC) card **101** for a retail issuer. Such a card **101** could be sold by the retail issuer for making purchases only in the retail issuer's stores or for use in a plurality of stores. As in the phone card context, the customer would ask the sales clerk for an Electronic Gift Certificate™ card of the desired amount. If the customer already has an Electronic Gift Certificate™ card, he or she might ask the clerk to add the desired amount to the already existing balance. The clerk swipes the card **101** and enters the transaction amount, either directly or using a nominal amount and/or the PIN pad, depending upon whether the debit network **107** is to be used. Using one of the methods discussed above, the data then makes its way to the processing hub **103**.

Alternatively, the activation could occur by processing the card **101** as a typical debit card using the debit network **107**. In such a case, the retail issuer would maintain accounts with the sponsor bank. When an activation transaction takes place, the bank would transfer the activation amount from a general account to an account corresponding to the card. If the card is to be accepted at a number of retail locations, the account corresponding to the card could be opened in the name of the card holder if appropriate paperwork is submitted to the bank. In this manner, the card could be used at any retail location capable of processing debit transactions. This would allow the card to serve as a prepaid card substitute for travelers checks and money orders. Regardless of the way in which the card is processed, the transaction data eventually makes its way to the processing hub **103**.

Upon receipt of the transaction data, the hub **103** recognizes the card **101** as being an Electronic Gift Certificate™ card of the retail issuer and activates or recharges the card

101 in the appropriate amount in an EGC database **205** maintained at the processing hub **103**.

Optionally, the Electronic Gift Certificate™ card **101** could also be recharged using a credit card via an on-line connection to the processing hub **103**, such as over the Internet.

Once a card **101** has been activated or recharged, the recipient of the card **101** is allowed to make purchases using the card. If the card is only for use in the retail issuer's stores, the purchase transaction might proceed in much the same manner as the activation process. The clerk would swipe the card **101** and enter the purchase amount. If the transaction is to be transmitted over the debit network, a nominal transaction amount may be used, and the actual amount entered instead of the PIN. A special code is used to indicate that the transaction is a purchase transaction rather than an activation or recharge transaction. If the debit network is used, the code could be the first digit of the PIN, followed by the purchase amount, thus allowing the software of the system **108** to recognize the type of transaction and decrypt the data accordingly.

Upon receipt of the data via one of the methods described above, the processing hub **103** compares the purchase amount to the balance for the card in the EGC database **205**. If the balance is greater than the purchase amount, the processing hub **103** will decrement the record in the database and will send back an approval code which will allow the transaction to proceed. If a sufficient balance is not present, the processing hub **103** will notify the POS device **105** that the transaction may not proceed. Preferably, an automated toll free number is provided for the holder of the card **101** to verify the remaining balance. The processing hub **103** preferably maintains records of all transactions.

If the card **101** is for use in many retail locations, it would instead be processed during purchase transactions as a typical debit card, preferably using the debit network **107**. In this case, either the retail issuer or the cardholder must have an account with the sponsor bank. When a purchase transaction takes place, the clerk or cardholder simply swipes the card and receives back a response in the same manner as a normal debit transaction. If sufficient funds are present in the account corresponding to the card, the transaction will be approved. The sponsor bank then transfers the purchase amount from the retail issuer's or cardholder's account to an account belonging to the retail location at which the purchase occurred, which account may or may not be located at the sponsor bank. The transaction data is then forwarded to the processing hub **103** so that the EGC database **205** can be updated.

In a preferred embodiment, an Electronic Gift Certificate™ card could also be used to obtain long distance calling time in addition to making purchases in the retail issuer's store. The retail issuer could contract with a prepaid phone card issuer to provide the calling time. When the card **101** is activated, the phone card issuer simultaneously creates an entry in its phone card database **204** corresponding to the entry in the EGC database **205**. The card **101** can then be used in exactly the same manner as the prepaid phone card discussed above. In order to prevent the use of the Electronic Gift Certificate™ card simultaneously to make purchases and to obtain long distance calling time, a safety procedure is provided. When the card **101** is used to make a long distance call, the phone card issuer hub **104** instructs the processing hub **103** to seize the record corresponding to the card **101** in the EGC database **205**. With the record seized, the system **108** will not authorize any purchasing activity for the duration of the call. When the call terminates, the phone

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card issuer hub **104** decrements the appropriate record in its phone card database **204** and instructs the processing hub **103** to do the same in the EGC database **205**. The record in the EGC database **205** is then unseized. When the card **101** is used to make a purchase, the processing hub **103** similarly instructs the phone card issuer hub **104** to seize the appropriate record in the phone card database **204** for the duration of the transaction. When the transaction is over, the records in the EGC database **205** and the phone card database **204** are decremented appropriately.

In the preferred embodiment of the invention, the retail issuer is also given the capability to award loyalty points to the bearer of the Electronic Gift Certificate™ card in recognition of purchases or recharges made. In such a case, the processing hub **103** maintains a separate loyalty card database **206**. When the Electronic Gift Certificate™ card bearer adds money to the card **101**, or makes a purchase using the card **101**, the system **108** may add a number of points proportional to the purchase price to the card's record in the loyalty card database **206**. Alternatively points could be awarded based upon the frequency of card usage rather than purchase amounts. In either case, when the card bearer reaches certain predefined point plateaus, he or she may be rewarded by the retail issuer with additional card value or with long-distance calling time.

III. Loyalty Card

Not unlike the loyalty feature add-on of the Electronic Gift Certificate™ card, the system **108** of the present invention may provide a separate loyalty card much like a frequent flier card that can have points added at virtually any POS device **105**.

A. Product/Manufacturer-Specific Loyalty Card

The card could be issued by a certain manufacturer to reward a customer with loyalty points for purchasing the manufacturer's product, regardless of the retail location of the purchase. This reward could be tied to the purchase of a single product type or to all of the manufacturer's products. The loyalty points awarded could be varied based upon any promotional campaigns being conducted by the manufacturer. Points are added to the card at participating retail locations which sell the manufacturer's product(s). The card **101** is swiped at any retail location, the purchase amount for the manufacturer's product is entered using the PIN pad of the POS device **105**, and the data is transmitted to the processing hub **103** using one of the methods described above. After receiving the data, the processing hub **103** credits the appropriate record in the loyalty card database **206** with a number of points proportional to the purchase price. The card is transportable to any participating retailer. The system **108** allows the manufacturer to connect to the processing hub **103** via an on-line connection to access the loyalty card database **206**. Again, the customer could be rewarded when certain point plateaus are reached.

B. Retailer-Specific Loyalty Card

Alternatively, the card could be issued by a particular retailer to reward customers for purchases made in the retailer's location(s). The retailer could award points for any purchase within the store, or could target special promotional items. The card would function in a manner similar to the product-specific card. Once again, the customer is rewarded when certain point plateaus are reached.

Alternatively, the loyalty data could be used to simultaneously credit other databases of the system **108**. For instance, instead of awarding loyalty points, the system could add value in real time to a record in the phone database **204** at the prepaid phone card issuer hub **104**, thus rewarding the customer with free phone time. Loyalty points might also

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be converted into a dollar value for use at the retail location. Optionally, the system **108** can keep records of a consumer's purchasing habits for marketing purposes. As with the manufacturer-specific card, the system **108** allows the retailer to connect to the processing hub **103** via an on-line connection to access the loyalty card database **206**.

IV. Information Retrieval Card

Finally, the multifunction card system **108** of the present invention is capable of providing an information retrieval card. In an exemplary embodiment, a medical information card which allows access and retrieval of a patient's complete medical history from a multitude of remote locations is provided. Each participating patient's medical information is stored in a record in a medical information database **207** maintained at the processing hub **103**. The record contains the identification number encoded on the patient's card **101**.

When medical history information data is needed, it may be requested by swiping the card **101** through a POS device **105** at a participating doctor's office or hospital. Preferably, a PIN is entered into the POS device **105** to ensure that only an authorized person is able to request the information. The POS device **105** would then send the request to the processing hub **103** via one of the routes described above. When the processing hub **103** receives the request from the authorized requester, it then immediately sends the information to the requestor via means preselected by the participating doctor's office or hospital. Such means may include electronic mail, facsimile, voice response, and other similar means. The medical history information may be updated by the patient or his or her doctor or insurer by forwarding new information to the operator of the system **108** via an on-line connection, over the Internet, by telephone, by facsimile, or by mail.

As a backup, the request could instead be made using a computer, wherein the computer connects to the processing hub **103** via the Internet or by direct modem connection. The requestor might be allowed to view, print, or download the appropriate medical history information. Alternatively, the request could be made by facsimile or by calling an automated toll free number and entering the card number.

In order to allow a cardholder to keep track of medical savings accounts or various other means for paying for medical services (e.g., Medicare), the system **108** also allows access to a database which maintains the medical funds for the cardholder. As described above under the Electronic Gift Certificate™ section, the system **108** is able to authorize, reject, and cause money to be transferred based upon the cardholder's available medical funds.

V. Intelligent Card™

In the preferred embodiment of the invention, the multifunction card system **108** is capable of providing a single card **101** which is capable of performing all of the foregoing functions. Preferably, the system **108** also allows for the card **101** to be used as an on-line debit card after the cardholder registers with the system. In order to let the system **108** know which function or functions the card **101** is serving in any particular transaction, a code is entered into the PIN pad of the POS device from which the transaction is originating. Alternatively, the system **108** could prompt the user to indicate the proper card function and the databases that must be accessed. Based upon this input, the system **108** carries out the appropriate actions. The system **108** can access each of the databases discussed above and can simultaneously increase or decrease each database as needed by the type of transaction occurring.

VI. Processing Hub Technical Details

The processing hub **103** of the present invention provides front-end POS device management and message processing

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for card authorization and activations. The processing hub **103** can be implemented using any computer having acceptable processing and storage capacity. It preferably comprises a Stratus RADIO Cluster™, which is a scaleable system based upon the standard Intel Pentium processor. The Stratus RADIO Cluster™ provides the processing hub **103** with a high degree of reliability and fault-tolerance. Since the Stratus system is scaleable, an adequate degree of redundancy can be provided in order to reduce the impact of individual failures. In addition, as demand for the multi-function card system increases, the processing hub **103** can be scaled to meet increasing demands for processing power and storage availability. The modular design of such a hub is upgradable for long term capacity planning and expansion.

The software of the system is preferably written in the C, Force, and Foxpro programming languages. The C language programs are preferably written to interface with specialty external interface boards. Force is preferably used for all on-line transaction processing, while Foxpro preferably provides for database management and the user interface. Since Force and Foxpro share database file structures, on-line transactions may be viewed by the system operators using the Foxpro interface.

In order to provide further reliability, all applications and data are replicated and synchronized across the processing hub **103** by Isis Reliable software. Load distribution among the modules is automatically controlled by the software to improve the response time and throughput. External communications nodes provide the necessary interface requirements of physical connectivity, protocol, message transmission, message validation, and message processing.

While the multifunction card system herein described constitutes the preferred embodiment of the present invention, it is to be understood that the invention is not limited to this precise form of system, and that changes may be made therein without departing from the scope of the invention which is defined in the following claims.

I claim:

1. A multifunction card system, comprising:

- a. at least one electronic gift certificate card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to the multifunction card system;
- b. means for receiving electronic gift certificate card activation data from an unmodified existing standard retail point-of-sale device when said electronic gift certificate card is swiped through the point-of-sale device, said electronic gift certificate card activation data comprising the unique identification number of the electronic gift certificate card and an electronic gift certificate activation amount;
- c. means for activating an account corresponding to the electronic gift certificate card with a balance equal to the electronic gift certificate activation amount;
- d. means for allowing a user of the electronic gift certificate card to purchase goods and services having a value up to the balance of the account corresponding to the electronic gift certificate card; and
- e. means for decreasing the balance of the account corresponding to the electronic gift certificate card by the value of the goods and services purchased.

2. A multifunction card system as recited in claim 1, further comprising:

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a. means for receiving electronic gift certificate card recharge data from an existing standard retail point-of-sale device when said electronic gift certificate card is swiped through the point-of-sale device, said electronic gift certificate card recharge data comprising the unique identification number of the electronic gift certificate card and an electronic gift certificate recharge amount; and

b. means for increasing the balance of the account corresponding to the electronic gift certificate card by the electronic gift certificate recharge amount.

3. A multifunction card system as recited in claim 1, wherein the first digit of said bank identification number is selected from the group consisting of four and five.

4. A multifunction card system as recited in claim 1, further comprising means for allowing a user of the electronic gift certificate card to obtain long distance telephone calling time, wherein the total of the value of the goods and services purchased and the long distance telephone calling time obtained cannot exceed the balance of the account corresponding to the electronic gift certificate card.

5. A multifunction card system as recited in claim 4, wherein said means for receiving electronic gift certificate activation data from an existing standard retail point-of-sale device when said electronic gift certificate card is swiped through the point-of-sale device employs the banking network.

6. A multifunction card system as recited in claim 4, further comprising means for associating loyalty data with the electronic gift certificate card based upon usage of the electronic gift certificate card.

7. A multifunction card system as recited in claim 1, further comprising means for associating loyalty data with the electronic gift certificate card based upon usage of the electronic gift certificate card.

8. A multifunction card system as recited in claim 1, wherein said means for receiving electronic gift certificate activation data from an existing standard retail point-of-sale device when said electronic gift certificate card is swiped through the point-of-sale device employs the banking network.

9. A multifunction card system as recited in claim 1, further comprising:

- a. at least one phone card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to the multifunction card system;
- b. means for receiving phone card activation data from an unmodified existing standard retail point-of-sale device when said phone card is swiped through the point-of-sale device, said phone card activation data comprising the unique identification number of the phone card and a phone card activation amount;
- c. means for activating an account corresponding to the phone card with a balance equal to the phone card activation amount;
- d. means for allowing a user of the phone card to obtain long distance telephone calling time having a value up to the balance of the account corresponding to the phone card; and
- e. means for decreasing the balance of the account corresponding to the phone card by the value of the long distance telephone calling time obtained.

10. A multifunction card system as recited in claim 9, further comprising:

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- a. means for receiving phone card recharge data from an existing standard retail point-of-sale device when said phone card is swiped through the point-of-sale device, said phone card recharge data comprising the unique identification number of the phone card and a phone card recharge amount; and
- b. means for increasing the balance of the account corresponding to the phone card by the phone card recharge amount.

11. A multifunction card system as recited in claim 9, wherein a single card with a single identification number can function as an electronic gift certificate card and as a phone card.

12. A multifunction card system as recited in claim 1, further comprising:

- a. at least one loyalty card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to the multifunction card system;
- b. means for receiving loyalty data from an existing standard retail point-of-sale device when said loyalty card is swiped through the point-of-sale device, said loyalty data comprising the unique identification number of the loyalty card and purchase data; and
- c. means for crediting an account corresponding to the loyalty card with loyalty points based upon the purchase data.

13. A multifunction card system as recited in claim 12, wherein a single card with a single identification number can function as an electronic gift certificate card and as a loyalty card.

14. A multifunction card system as recited in claim 1, further comprising:

- a. at least one medical information card having a unique identification number associated with it, said medical information card belonging to a patient;
- b. a database comprising at least one record corresponding to said medical information card, said record containing medical history information about the patient; and
- c. means for allowing an authorized requester to obtain the medical history information about the patient using the unique identification number associated with the medical information card.

15. A multifunction card system as recited in claim 14, wherein a single card with a single identification number can function as an electronic gift certificate card and as a medical information card.

16. A prepaid phone card system, comprising:

- a. at least one phone card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to the prepaid phone card system;
- b. means for receiving phone card activation data from an unmodified existing standard retail point-of-sale device when said phone card is swiped through the point-of-sale device, said phone card activation data comprising the unique identification number of the phone card and a phone card activation amount;
- c. means for activating an account corresponding to the phone card with a balance equal to the phone card activation amount;

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- d. means for allowing a user of the phone card to obtain long distance telephone calling time having a value up to the balance of the account corresponding to the phone card; and
- e. means for decreasing the balance of the account corresponding to the phone card by the value of the long distance telephone calling time obtained.

17. A prepaid card system as recited in claim 16, further comprising:

- a. means for receiving phone card recharge data from an existing standard retail point-of-sale device when said phone card is swiped through the point-of-sale device, said phone card recharge data comprising the unique identification number of the phone card and a phone card recharge amount; and
- b. means for increasing the balance of the account corresponding to the phone card by the phone card recharge amount.

18. A prepaid phone card system as recited in claim 16, wherein the first digit of said bank identification number is selected from group of numbers consisting of the numbers four and five.

19. A prepaid card system as recited in claim 16, wherein said means for receiving phone card activation data from an existing standard retail point-of-sale device when said phone card is swiped through the point-of-sale device employs the banking network.

20. A loyalty card system, comprising:

- a. at least one loyalty card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to the loyalty card system;
- b. means for receiving loyalty data from an unmodified existing standard retail point-of-sale device when said loyalty card is swiped through the point-of-sale device, said loyalty data comprising the unique identification number of the card and purchase data; and
- c. means for crediting an account corresponding to the loyalty card with loyalty points based upon the purchase data.

21. A loyalty card system as recited in claim 20, wherein the first digit of said bank identification number is selected from a group of numbers consisting of the numbers four and five.

22. A loyalty card system as recited in claim 20, wherein said means for receiving loyalty data from an existing standard retail point-of-sale device when said loyalty card is swiped through the point-of-sale device employs the banking network.

23. A method of activating or recharging a prepaid card having a unique identification number encoded on it, the identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to a prepaid card system, comprising the steps of:

- a. swiping the card through an unmodified existing standard retail point-of-sale device;
- b. entering an amount into the point-of-sale device;
- c. transmitting the identification number and the amount from the point-of-sale device to a processing hub;
- d. crediting an account balance in a database with the amount;
- e. allowing a user of the card to purchase goods and services using the card; and

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- f. allowing a user of the card to obtain long distance telephone calling time using the card;
 - g. wherein the total of the value of the goods and services purchased and the long distance telephone calling time obtained using the card cannot exceed the account balance.
- 24.** A method according to claim **23**, further comprising the step of associating loyalty data with the card based upon usage of the card.
- 25.** A method according to claim **24**, further comprising the step of transferring loyalty data to a phone card issuer.
- 26.** A method according to claim **23**, wherein said step of transmitting the identification number and the amount from the point-of-sale device to a processing hub is carried out at least in part via the banking network.
- 27.** A method of activating or recharging a prepaid phone card having a unique identification number encoded on it, the identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to a prepaid phone card system, comprising the steps of:
- a. swiping the phone card through an unmodified existing standard retail point-of-sale device;
 - b. entering an amount into the point-of-sale device;
 - c. transmitting the identification number and the amount from the point-of-sale device to a processing hub;
 - d. transmitting the identification number and the amount from the processing hub to a prepaid phone card issuer hub;
 - e. crediting an account balance in a phone card database with the amount; and
 - f. allowing a user of the phone card to obtain long distance telephone calling time having a value up to the account balance.
- 28.** A method according to claim **27**, wherein said step of transmitting the identification number and the amount from the point-of-sale device to a processing hub is carried out at least in part via the banking network.
- 29.** A method of adding points to a loyalty card having a unique identification number encoded on it, the identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to a loyalty card system, comprising the steps of:
- a. swiping the loyalty card through an unmodified existing standard retail point-of-sale device;
 - b. entering purchase data into the point-of-sale device;
 - c. transmitting the identification number and the purchase data from the point-of-sale device to a processing hub; and
 - d. crediting an account in a database with loyalty points based upon the purchase data.
- 30.** A method according to claim **29**, wherein said step of transmitting the identification number and the purchase amount from the point-of-sale device to a processing hub is carried out at least in part via the banking network.
- 31.** A method according to claim **29**, further comprising the step of allowing the owner of the loyalty card to redeem loyalty points for an item selected from the group consisting of goods, services, discounts on goods and services, long distance telephone calling time value, and money value.
- 32.** A multifunction card system comprising:
- a. at least one debit/medical services card having a unique identification number encoded on it comprising a bank

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- identification number approved by the American Banking Association for use in a banking network;
 - b. a transaction processor receiving card data from an unmodified existing standard point-of-sale device, said card data including a unique identification number;
 - c. a processing hub receiving directly or indirectly said card data from said transaction processor; and
 - d. said processing hub accessing a first database when the card functions as a debit card and said processing hub accessing a second database when the card functions as a medical card.
- 33.** The multifunction card system of claim **32**, wherein the unique identification number further comprises a medical identification number.
- 34.** A system comprising:
- a. at least one electronic gift certificate card having an electronic gift certificate card unique identification number encoded on it, said electronic gift certificate card unique identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;
 - b. a transaction processor receiving electronic gift card activation data from an unmodified existing standard retail point-of-sale device, said electronic gift certificate card activation data including said unique identification number and an electronic gift certificate card activation amount;
 - c. a processing hub receiving directly or indirectly said activation data from said transaction processor; and
 - d. said processing hub activating an account corresponding to the electronic gift certificate card unique identification number with a balance corresponding to the electronic gift certificate activation amount.
- 35.** The system of claim **34**, wherein the electronic gift certificate card activation amount is encoded in the unique identification number.
- 36.** The system of claim **34**, wherein the electronic gift certificate card activation amount is entered at the point-of-sale device.
- 37.** The system of claim **34**, wherein said processing hub allows a user of the electronic gift certificate card to purchase a value up to the balance corresponding to the electronic gift certificate activation amount.
- 38.** The system of claim **34**, wherein:
- a. said transaction processor receives electronic gift certificate card recharge data from the existing standard retail point-of-sale device, said electronic gift certificate card recharge data including said unique identification number and an electronic gift certificate card recharge amount; and
 - b. said processing hub increasing said amount corresponding to the electronic gift certificate card unique identification number with a balance corresponding to the electronic gift certificate card recharge amount.
- 39.** The system of claim **34**, wherein the first digit of the bank identification number is selected from a group of numbers consisting of the numbers four and five.
- 40.** The system of claim **34**, wherein the processing hub allows the use of the electronic gift certificate card to obtain phone calling time.
- 41.** The system of claim **34**, further comprising:
- a. a prepaid phone card issuer hub receiving directly or indirectly the electronic gift card activation data from said processing hub; and
 - b. said prepaid phone card issuer hub activating a record in a phone card database corresponding to the electronic gift certificate card unique identification number.

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42. The system of claim **41**, wherein the prepaid phone card issuer hub instructs the processing hub to seize the account corresponding to the electronic gift certificate card unique identification number where an electronic gift certificate card is used to make a call.

43. The system of claim **41**, wherein the processing hub instructs the phone card issuer hub to seize the record corresponding to the electronic gift certificate card unique identification number when the electronic gift certificate card is used to make a transaction.

44. The system of claim **34**, wherein the transaction processor is coupled to the banking network.

45. The system of claim **34**, wherein the processing hub associates loyalty data with the electronic gift certificate card based upon the usage of the electronic gift certificate card.

46. The system of claim **34**, wherein the activation data received at the processing hub is encrypted.

47. The system of claim **34**, wherein the processing hub includes a loyalty card database.

48. The system of claim **34**, wherein the processing hub includes medical information card database.

49. The system of claim **34**, wherein the processing hub includes an electronic gift certificate card database, a loyalty card database, and a medical information database.

50. A multifunction card system comprising:

a. at least one electronic gift certificate card having an electronic gift certificate card unique identification number encoded on it, said electronic gift certificate card unique identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;

b. a transaction processor receiving electronic gift card activation data from an unmodified existing standard retail point-of-sale device, said electronic gift certificate card activation data including the electronic gift certificate card unique identification number and an electronic gift certificate card activation amount;

c. a processing hub receiving directly or indirectly said activation data from said transaction processor; and

d. said processing hub activating an account corresponding to the electronic gift certificate card unique identification number with a balance corresponding to the electronic gift certificate activation amount.

51. The multifunction card system of claim **50**, wherein the electronic gift certificate card activation amount is encoded in the unique identification number.

52. The multifunction card system of claim **50**, wherein the electronic gift certificate card activation amount is entered at the point-of-sale device.

53. The multifunction card system of claim **50**, further comprising:

a. at least one phone card having a phone card unique identification number encoded on it, said phone card unique identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;

b. said transaction processor receiving phone card activation data from said existing standard retail point-of-sale device, said phone card activation data including said phone card unique identification number and a phone card activation amount;

c. said processing hub receiving directly or indirectly said phone card activation data from said transaction processor and recognizing the phone card unique identification number of the phone card as being associated with a particular prepaid phone card issuer; and

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d. said processing hub forwarding the phone card activation data to a particular prepaid phone card issuer hub.

54. The multifunction system of claim **53**, wherein the particular prepaid phone card issuer hub contains at least one phone card database which stores information about each said phone card and activates the stored information to permit debiting of a predetermined value of phone calling in response to the activation data.

55. The multifunction system of claim **50**, further comprising:

a. at least one loyalty card having a loyalty card unique identification number encoded on it, said loyalty card identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;

b. said transaction processor receiving loyalty card activation data from said existing standard retail point-of-sale device, said loyalty card activation data including said loyalty card unique identification number and purchase data;

c. said processing hub receiving directly or indirectly said phone card activation data from said transaction processor; and

d. said processing hub crediting an account corresponding to the loyalty card with loyalty points based upon the purchase data.

56. The multifunction system of claim **50**, further comprising:

a. at least one medical information card having a medical card unique identification number associated with it, said medical information belonging to a patient; and

b. said processing hub including at least one record corresponding to said medical information card, said record containing medical history information about the patient.

57. A multifunction card system comprising:

a. at least one card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network;

b. a transaction processor receiving card activation data from an unmodified existing standard retail point-of-sale device, said card activation data including said unique identification number;

c. a processing hub receiving directly or indirectly said activation data from said transaction processor; and

d. said processing hub activating an account corresponding to the unique identification number, thereby permitting later access to said account.

58. The multifunction card system of claim **57**, wherein said card is selected from the group consisting of an electronic gift certificate card, a phone card, a loyalty card, and a medical information card.

59. The multifunction card system of claim **57**, wherein said card performs the functions of an electronic gift certificate card, a phone card, a loyalty card, and a medical information card.

60. A method of activating a prepaid card having a unique identification number encoded on it, the identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, the method comprising the steps of:

a. swiping the card through an unmodified existing standard point-of-sale device;

b. transmitting the identification number and an activation amount from the point-of-sale device to a processing hub; and

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c. activating an account in the processing hub corresponding to the identification number.

61. The method of claim **60**, further comprising:

a. transmitting the identification number and a recharge amount from the point-of-sale device to a processing hub; and

b. recharging the account in the processing hub corresponding to the identification number.

62. The method of claim **60**, further comprising entering the activation amount into the point-of-sale device.

63. The method of claim **60**, wherein the step of transmitting the identification number and the activation amount

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from the point-of-sale device is carried out at least in part over the banking network.

64. The method of claim **60**, further comprising allowing a user of the card to obtain calling time using the card.

65. The method of claim **60**, further comprising allowing a user of the card to purchase goods and services using the card.

66. The method of claim **60**, further comprising associating loyalty data with the card based upon usage of the card.

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(12) EX PARTE REEXAMINATION CERTIFICATE (9123rd)
United States Patent
Dorf

(10) Number: **US 6,000,608 C1**
 (45) Certificate Issued: **Jul. 10, 2012**

(54) MULTIFUNCTION CARD SYSTEM(75) Inventor: **Robert E. Dorf**, Raleigh, NC (US)(73) Assignee: **AlexSam, Inc.****Reexamination Request:**

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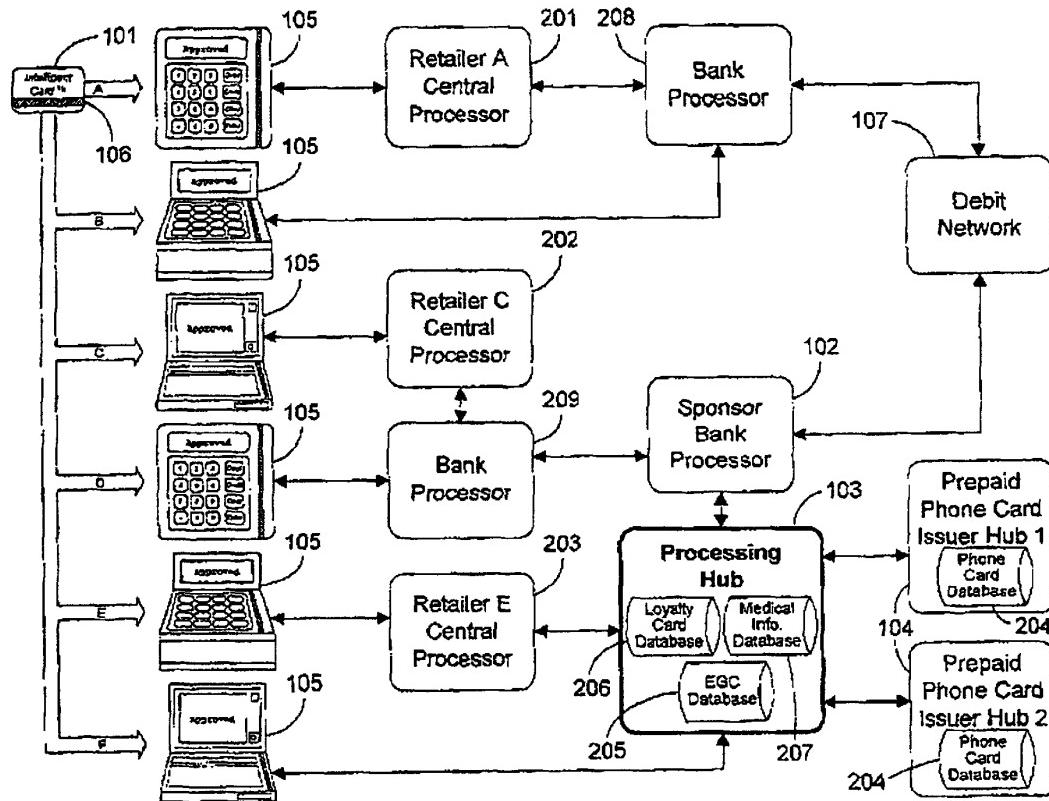
G07F 7/08	(2006.01)
G07F 7/10	(2006.01)

(52) U.S. Cl. **235/380; 235/375; 235/376****(58) Field of Classification Search** None
See application file for complete search history.**(56) References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/009,793, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner—John M Hotaling**(57) ABSTRACT**

Disclosed is a multifunction card system which provides a multifunction card capable of serving as a prepaid phone card, a debit card, a loyalty card, and a medical information card. Each card has an identification number comprising a bank identification number which assists in establishing communications links. The card system can be accessed from any existing point-of-sale (POS) device. The POS device treats the card as a credit or debit card and routes transaction data to a processing hub using the banking system. The processing hub coordinates the various databases corresponding to the various functions of the card.



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**EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307**

NO AMENDMENTS HAVE BEEN MADE TO
THE PATENT

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AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

The patentability of claims 1, 3-5, 8-11, 16-19, 23, 26-28,
⁵ 34, 36, 37, 39-44, 50, 52-54, 57, 58, 60, 62, 63 and 65 is
confirmed.

Claims 2, 6, 7, 12-15, 20-22, 24, 25, 29-33, 35, 38, 45-49,
51, 55, 56, 59, 61, 64 and 66 were not reexamined.

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US006189787B1

(12) **United States Patent**
Dorf(10) **Patent No.:** US 6,189,787 B1
(45) **Date of Patent:** *Feb. 20, 2001(54) **MULTIFUNCTIONAL CARD SYSTEM**(76) Inventor: **Robert E. Dorf**, 904 Bromley Way, Raleigh, NC (US) 27615

(*) Notice: Under 35 U.S.C. 154(b), the term of this patent shall be extended for 0 days.

This patent is subject to a terminal disclaimer.

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(21) Appl. No.: **09/428,641**(22) Filed: **Oct. 27, 1999****Related U.S. Application Data**

(63) Continuation of application No. 08/891,261, filed on Jul. 10, 1997.

(51) **Int. Cl.⁷** **G06K 5/00**(52) **U.S. Cl.** **235/380; 235/382; 235/492.01;**

235/493

(58) **Field of Search** 235/380, 382, 235/492, 493(56) **References Cited****U.S. PATENT DOCUMENTS**

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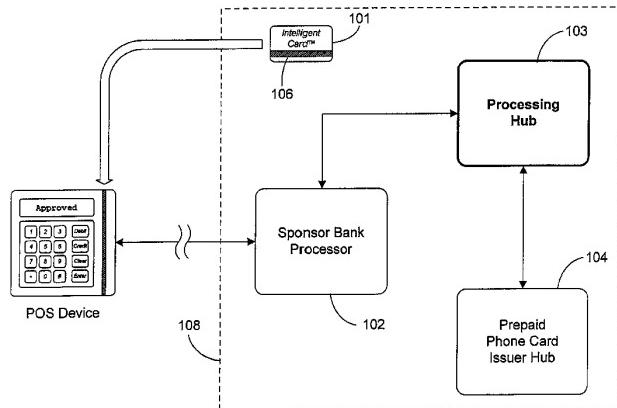
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Primary Examiner—Thien M. Le*Assistant Examiner*—Daniel S Felten(74) *Attorney, Agent, or Firm*—Stroock & Stroock & Livan LLP**ABSTRACT**

Disclosed is a multifunction card system which provides a multifunction card capable of serving as a prepaid phone card, a debit card, a loyalty card, and a medical information card. Each card has an identification number comprising a bank identification number which assists in establishing communications links. The card system can be accessed from any existing point-of-sale (POS) device. The POS device treats the card as a credit or debit card and routes transaction data to a processing hub using the banking system. The processing hub coordinates the various databases corresponding to the various functions of the card.

34 Claims, 2 Drawing Sheets

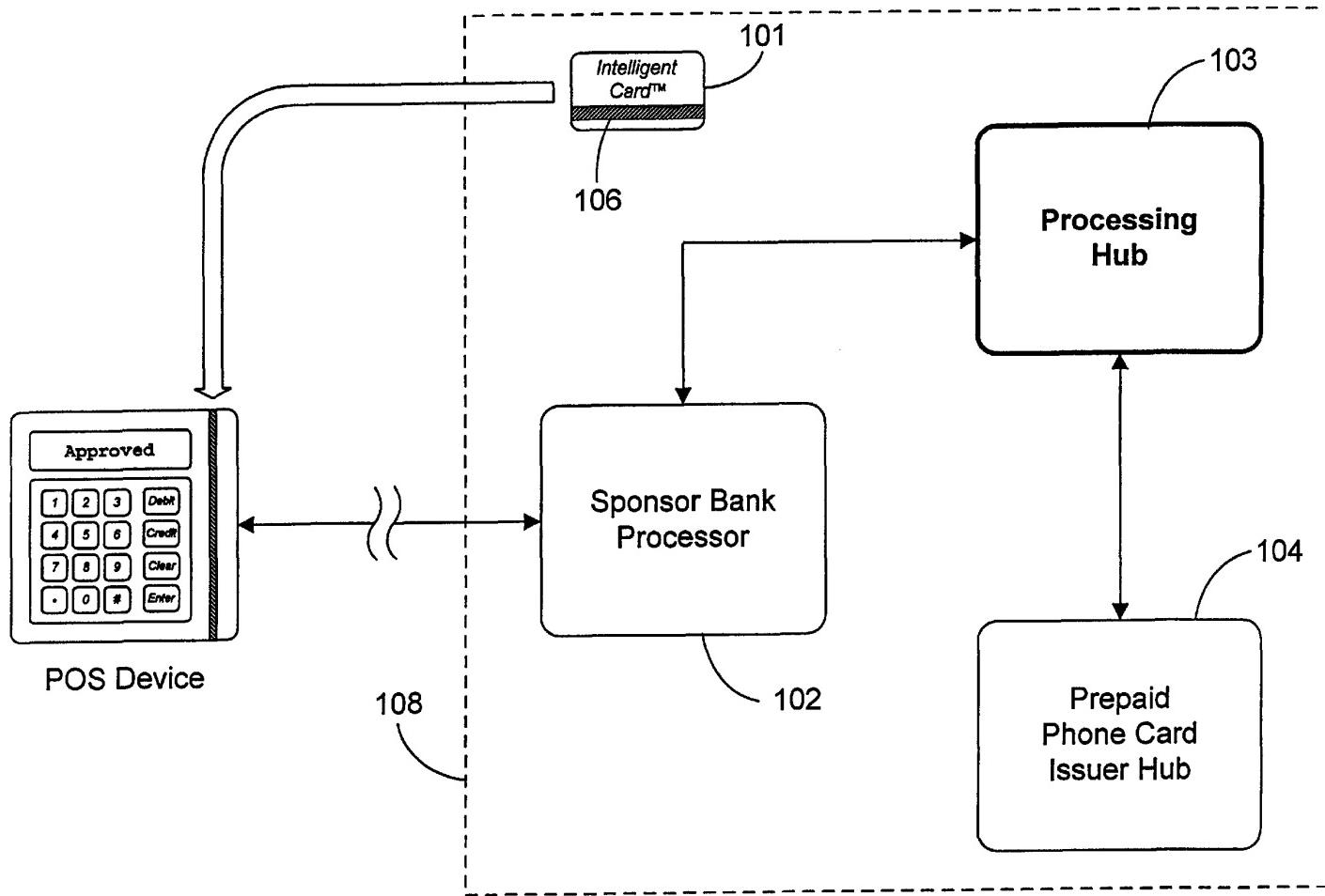
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FIG. 1



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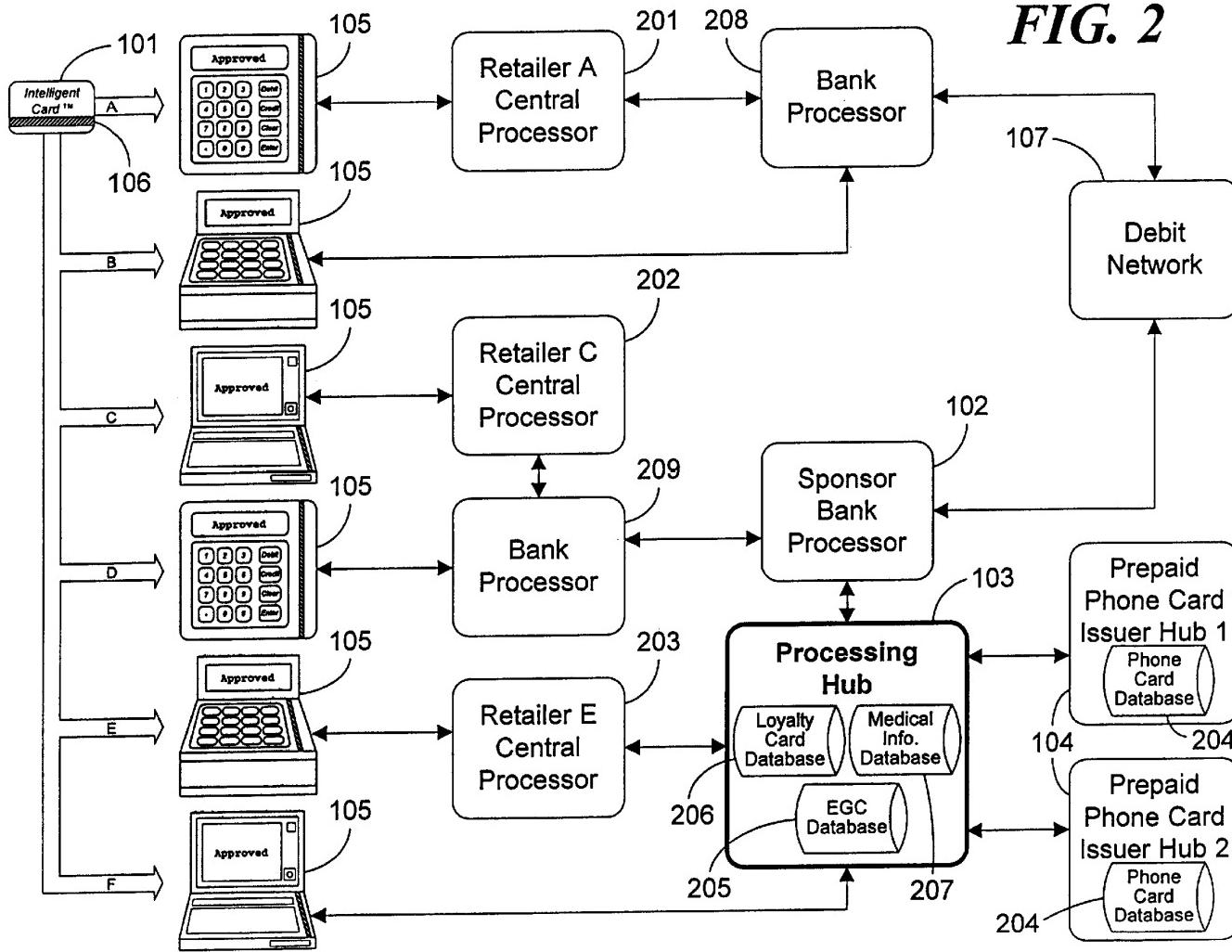
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FIG. 2



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1**MULTIFUNCTIONAL CARD SYSTEM**

This application is a continuation of application Ser. No. 08/891,261 filed Jul. 10, 1997, the claims of which are allowed.

FIELD OF THE INVENTION

The present invention relates generally to debit card systems, both bank-issued and non-bank-issued, and more particularly to a multifunction card system that can be accessed by a variety of standard point-of-sale devices, by phone, by fax, or over the Internet.

BACKGROUND OF THE INVENTION**I. Debit Cards**

Banking institutions often issue debit cards to their customers to give them access to funds from their savings or checking accounts. Such a debit card might be an on-line debit card or an off-line debit card. On-line debit cards, often referred to as automatic teller machine (ATM) cards, require a personal identification number (PIN) to be entered into an ATM or point-of-sale (POS) device in order to authorize the transaction. Once completed, the transaction clears the bank account immediately. Off-line debit cards function like credit cards, and usually carry the VISA® or MasterCard® logo. A retailer processes the card like a credit card and the customer signs a receipt. The funds then clear the bank account in one to three days.

While such debit cards are extremely useful and provide convenience for bank depositors, they generally do not serve a plurality of functions. Therefore, there is a need in the art for a debit/credit card capable of performing a plurality of functions, such as an electronic gift certificate card, a prepaid phone card, and a loyalty card, all in a real-time secure environment. There is also a need in the art for a system which can provide a card substitute for travelers checks and money orders which can be accepted by any POS device or ATM for financial transactions. Further, there is a need for a processing center which can manage such a multifunction card system.

II. Prepaid Phone Cards

Prepaid card systems are used by the telephone industry to allow customers to pre-purchase long distance calling time. Such cards are typically purchased in predefined value increments. The card provides the customer with an amount of long distance calling time equivalent to the predefined value increment.

Each of the cards has an identification number printed or magnetically stored on it. The identification number is also stored in a record in a database maintained by the card issuer. This record also stores the predefined value of the card. When the cards are sent to the retail location from which they will be sold, the corresponding records in the database are activated, thus allowing the card to be used immediately by a customer. To use the card, the customer dials a toll free number to access the card issuer's system, enters the identification number, and then makes the desired long-distance call. During the call, the value of the card in the database is decremented accordingly. When the value of the card is exhausted, the call terminates. If the customer ends the call before the value of the card is exhausted, the remaining value may be used for additional calls. Once the entire value of the card has been used, it is discarded.

These prior art prepaid phone card systems have several disadvantages. First, since the cards are active while on the shelf in the retail location, they may be stolen by a thief and easily used. Second, the prior art systems do not allow the

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customer to purchase a card having any given value, nor do they allow the customer to recharge the value of the cards once the are depleted.

One way to address some of the drawbacks of prior art 5 prepaid phone card systems would be to install activation terminals unique to the prepaid card issuer. This is referred to as a "closed system." U.S. Pat. No. 5,577,109 to Stimson et al. discloses such a closed system. In the Stimson system, the cards are not preactivated. Each of the retail locations 10 from which cards are to be sold is provided with a dedicated activation terminal which allows the retail operator to set the value of the card at the time of the sale. The activation terminal connects to the card issuer's system to pass along the value amount and to request activation of the card. 15 Depleted cards can be recharged in the same manner as they are sold. A serious disadvantage of the Stimson system is that it requires single-function dedicated hardware to be installed in each retail location, resulting in a very inflexible and expensive system.

20 Thus, there is a need in the art for a prepaid phone card activating system which is easily and inexpensively deployed, and which allows cards to be purchased in varying amounts and to be recharged without requiring the use of a closed system to handle the transactions.

III. Loyalty Cards

Loyalty cards are used to reward consumers for purchasing goods or services. For instance, airlines commonly reward frequent fliers with points for each mile flown with that airline. When the consumer accumulates a certain number of points, he or she is rewarded with free or discounted air fare. In this and other similar systems, the loyalty card issuer directly participates in the sale transaction. Such systems, however, do not allow a manufacturer of a product which is sold by an unrelated retailer to immediately reward the ultimate purchaser of the product with loyalty points. Since the manufacturer does not know of the ultimate sale until much later, if ever, it is difficult for such a manufacturer to conduct a loyalty program. Thus, there is presently no method for creating a product-specific loyalty 30 card as opposed to a retailer-specific card. Nor is there a system for communicating loyalty data to databases not located at the retail establishment.

Furthermore, prior art loyalty programs generally do not credit the consumer's loyalty account in real-time as a 35 purchase transaction takes place. Therefore, the consumer is unable to enjoy the benefits of their added loyalty points immediately. Finally, prior art loyalty programs commonly require significant startup efforts and expenses before the system is operational. Therefore, there is a need in the art for a real-time loyalty card system which is easily deployed, and 40 which is capable of providing a product-specific loyalty card as well as a retailer-specific card. There is also a need for a system which can reward customers automatically for their loyalty and communicate this loyalty reward to databases 45 other than at a retail location.

IV. Information Retrieval

Often, it is important to access certain types of information in a very fast and convenient manner. For example, a person's medical history can be extremely important in 50 assessing the propriety of certain medical procedures during a medical emergency. Presently, in order to obtain a patient's medical history, the patient or his or her doctor must request the appropriate files from the patient's previous doctor(s). It often takes a number of days to receive the requested information. In a medical emergency, this delay is often far too long. Thus, there is a need for patients to have control 55 over their own medical history data. Further, there is a need

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for this data to be instantly available to the patient, or the patient's doctor if the patient is incapacitated.

V. Multifunction Card

Due to the proliferation of various types of cards (e.g., credit/debit, long-distance calling, loyalty, etc.) over the last couple of decades, it has become increasingly difficult to keep track of each individual card. There is a need for a card system which can serve a number of functions, thus allowing the consumer to have one card which may act as their card for financial transactions, long-distance telephone calls, loyalty information, and medical information.

SUMMARY OF THE INVENTION

The present invention solves the problems associated with prior art card systems by providing an improved multifunction card system. The multifunction card system comprises at least one electronic gift certificate card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving electronic gift certificate card activation data from an existing standard retail point-of-sale device when the electronic gift certificate card is swiped through the point-of-sale device, the electronic gift certificate card activation data comprising the unique identification number of the electronic gift certificate card and an electronic gift certificate activation amount; means for activating an account corresponding to the electronic gift certificate card with a value equal to the electronic gift certificate activation amount; and means for allowing a user of the electronic gift certificate card to purchase goods having a value up to the electronic gift certificate activation amount.

The multifunction card system further comprises at least one phone card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving phone card activation data from an existing standard retail point-of-sale device when the phone card is swiped through the point-of-sale device, the phone card activation data comprising the unique identification number of the phone card and a phone card activation amount; means for activating an account corresponding to the phone card with a value equal to the phone card activation amount; and means for allowing a user of the phone card to obtain long distance telephone calling time having a value up to the phone card activation amount.

In a preferred embodiment, the multifunction card system further comprises at least one loyalty card having a unique identification number encoded on it, the identification number comprising a bank identification number corresponding to the multifunction card system; means for receiving loyalty data from an existing standard retail point-of-sale device when the loyalty card is swiped through the point-of-sale device, the loyalty data comprising the unique identification number of the loyalty card and a purchase amount; and means for crediting an account corresponding to the loyalty card with a number of loyalty points proportional to the purchase amount.

Optionally, the multifunction card system of the present invention may also comprise at least one medical information card having a unique identification number associated with it, the medical information card belonging to a patient; a database comprising at least one record corresponding to the medical information card, the record containing medical history information about the patient; and means for allowing an authorized requestor to obtain the medical history

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information about the patient using the unique identification number associated with the medical information card.

BRIEF DESCRIPTION OF THE DRAWINGS

The present invention will be more fully understood by reference to the following detailed description when considered in conjunction with the following drawings wherein like reference numbers denote the same or similar portions or processes shown throughout the several Figures, in which:

FIG. 1 is a block diagram of the multifunction card system of the present invention; and

FIG. 2 is a block diagram demonstrating the various ways in which a retail point-of-sale device might connect to the multifunction card system of the present invention.

DETAILED DESCRIPTION OF THE INVENTION

The present invention is a multifunction card system which allows for the activation of prepaid phone cards and the use of Electronic Gift Certificate™ cards, loyalty cards, debit cards, and medical information cards. Further, the system provides for the immediate linkage of these various functions. FIG. 1 illustrates the multifunction card system

108 of the present invention. The system **108** comprises a plurality of cards **101**, a sponsor bank processor **102**, and a processing hub **103**, which serves as the nerve center of the system **108**. If the system **108** is to provide prepaid phone

15 cards, it will also include a prepaid phone card issuer hub **104** maintained by a prepaid phone card issuer. In order to achieve the desired functionality, the system **108** uses existing banking networks in a unique and novel way to gain access to virtually all existing retail point-of-sale (POS) devices **105**. These devices **105** include stand-alone POS terminals, cash registers with POS interfacing, computers with POS interfacing, and other similar devices which can be used to access the banking system. As used herein, POS device includes all such devices, whether data entry is effected by swiping a card through the device or by manual entry.

To access these POS devices, the operator of the system **108** must apply for and obtain a Bank Identification Number (BIN) from the American Banking Association. The BIN

20 serves as a unique identifier of the multifunction card system **108** within the banking network. The BIN is encoded on a magnetic strip **106** on each card **101** in the system **108** as a part of the card's identification number. Alternatively or additionally, the BIN and identification number could be encoded as a bar code, embossed on the surface on the card **101** in numerals for manual entry, or provided by any other means known in the art.

Preferably, the BIN's first digit will be the same number as the first BIN digit used by a popular card issuer. This is because POS devices are preprogrammed to recognize only certain types of cards, such as those issued by VISA® and MasterCard® American Express® etc. As a rule, these POS devices must be reprogrammed before they will accept a new type of card. However, since POS devices already

25 recognize cards issued by these popular card issuers, a new type of card will also be recognized by such devices if it has a BIN that begins with the same number used by one of the popular card issuers. Since VISA® and MasterCard® are the most universally accepted cards, the BIN of the multifunction card system **108** of the present invention preferably will begin with the same number used by either VISA® or MasterCard® (i.e., "4" or "5", respectively). By using one of

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these numbers, the card **101** will be recognized by almost all existing POS devices **105** as a debit or credit card, and its transactions will be automatically routed by the banking system to the correct destination. This occurs regardless of the type of POS device **105** used, since all such devices are designed to interface with the banking network. Although the BIN number will preferably begin with a "4" or "5", it may begin with any number that is recognized by POS devices **105**.

The operator of the system **108** should also have a sponsoring bank whose bank processor **102** will serve as the link between the processing hub **103** and the banking network. Alternatively, the operator of the system **108** could itself be a banking institution.

By providing a means for any given POS device **105** to connect to the processing hub **103**, the system **108** allows a retailer to remotely activate or add value or loyalty data to a system card. The method by which this occurs is set forth more fully below in the context of the various functions of the card.

I. Prepaid Phone Card

A plurality of long distance service providers may contract with the operator of the multifunction card system **108** to issue prepaid phone cards **101** for use in the system **108**. Alternatively, a long distance service provider may itself be the operator of the system **108**. The long distance service provider will be referred to as a phone card issuer. A phone card issuer provides prepaid phone cards **101** to retailers who sell the cards **101** at their retail locations. Until activated, the cards **101** have no intrinsic value associated with them. Therefore, they may be placed on store shelves in easily accessible areas without the fear of losses due to theft. When a customer wishes to purchase or recharge one of the cards **101**, he or she informs the sales clerk of the monetary amount desired. Depending upon the system chosen by the particular phone card issuer, this amount may be one of a finite number of predefined amount increments, or may be selected by the customer. The clerk swipes the card **101** through the POS device **105**. Depending upon the amount of customization that has occurred at the retailer's location, there are a number of ways in which the POS device **105** may connect to the system's **108** processing hub **103** to carry out the transaction. FIG. 2 illustrates several of these methods.

The first two methods shown in FIG. 2, methods A and B, are the most easily deployed, but cost the most on a per-transaction basis. To route information to the processing hub **103**, these methods employ the debit network **107** used by banking institutions. The retailer in method A (retailer A) has a central processor which controls each of its POS devices **105** and connects them to a processor **208** at a bank chosen by the retailer. Retailer B's POS device **105** connects directly to the bank processor **208**. Otherwise, the two methods are the same.

Banking regulations currently require that any transaction taking place over the debit network **107** must result in an actual transfer of funds. Since this phone card activation transaction is not a typical debit transaction, it is presently desirable to keep the official amount of the transaction to a minimum, yet still comply with the banking regulations. Therefore, regardless of the actual sale amount, the clerk enters a nominal transaction amount. In a preferred embodiment, the nominal transaction amount is keyed to the actual transaction amount (e.g., \$0.01 nominal=\$10.00 actual, \$0.02 nominal=\$20.00 actual, etc.). Therefore, the actual transaction amount can be ascertained from the nominal amount. In this embodiment, the card could only be

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activated or recharged in predefined increments. If the card is to have a fixed value, the activation amount could also be encoded on the magnetic strip **106** of the card **101** as part of the card's identification number.

In an alternate embodiment, the card could be activated or recharged in any amount desired by the customer. In this case, the nominal transaction amount would be a fixed value, such as \$0.01. Once the nominal transaction amount is entered, the actual sale amount could then be entered on the PIN pad of the POS device **105** instead of the personal identification number (PIN) that would normally be entered when using a debit card. By entering the actual sale amount in this manner, it can be any desired amount.

In either case, before it transmits the data, the POS device **105** encrypts the information to be sent. This information includes the identification number read from the card's magnetic strip **106**, the nominal transaction amount, and the actual sale amount if it was entered into the PIN pad. The system **108** contains software which will decrypt and translate the data upon receipt. Once the encryption has taken place, the POS device **105** transmits the data either directly or via the central processor **201** to the bank processor **208**. The bank processor **208** receives the data and transmits it over the debit network **107**. The debit network **107** then forwards the data to the sponsoring bank's processor **102**. As mentioned earlier, the sponsoring bank is one which has agreed to operate as a link between the debit network **107** and the processing hub **103**.

As mentioned earlier, banking regulations as they currently exist require that transactions taking place over the debit network must result in a transfer of funds. Preferably, in order to comply with the banking regulations, the sponsoring bank transfers the nominal amount (e.g., \$0.01) from one account belonging to the retailer to another account also belonging to the retailer. The bank processor **102** then forwards the data from the POS device **105** to the processing hub **103**.

In methods C and D, the retailers' central processor **202** or POS device **105**, respectively, again connect to a processor **209** at a retailer-chosen bank. By agreement between the operator of the multifunction card system **108** and the retailer-chosen bank, this bank processor **209** is programmed to recognize the multifunction card system's BIN and to forward the system's transactions directly to the sponsoring bank's processor **102** rather than using the debit network **107**. Since the debit network **107** is not used, it is not necessary to use a nominal sale amount, although such a method would nonetheless work and might be preferred by the retailer for security and bookkeeping purposes. The system **108** could instead be programmed to prompt the clerk for the appropriate information. As in methods A and B, the sponsor bank processor **102** forwards the necessary information to the processing hub **103**. Although methods C and D are more efficient than methods A and B on a per transaction basis, they require some customization at the retailer location to cause the retailer to connect to a bank processor **209** that recognizes the system's BIN.

Methods E and F are the least costly methods of connecting to the processing hub **103** (i.e., directly from the retailer's central processor **203** or from the POS device **105** itself). The connection may be made via a toll-free telephone line, a dedicated phone line, over the Internet, or any other standard communication means. Again, however, these methods require the most customization at the retailer location to cause the retailer's system to recognize the multifunction card system's cards and to route their transactions directly to the processing hub **103**. Such customization,

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however, still does not require reprogramming of the POS devices themselves. The connection method chosen may be adjusted to fit the individual retailer's needs.

Regardless of the method used, the data will eventually arrive at the processing hub 103. If the transmission has taken place over the debit network 107, the data must be decrypted using equipment well known in the art for decrypting debit transaction data. Once the data is received and, if necessary, decrypted, the processing hub 103 recognizes the identification number of the card as being associated with a particular prepaid phone card issuer. Next, a security check is performed to verify that this transaction is originating from a retailer that is authorized to sell the prepaid phone cards. If the transaction is originating from an authorized retailer, the transaction will proceed. The processing hub 103 will then forward the card identification number, retail store and POS device information, and amount information to the issuer hub 104 maintained by the prepaid phone card issuer. The issuer hub 104 contains one or more phone card databases 204 which store information about each phone card. When the issuer hub 104 receives the data from the processing hub 103, it activates the record in the phone card database 204 having the same identification number as the card 101. The value field in the record is then increased by the appropriate purchased amount. If the card is of a fixed value, the record is simply activated. The issuer hub 104 then returns an authorization number which travels back along the same path to the originating POS device 105. The customer may then dial the prepaid phone card issuer's toll free number, enter the card number and any required PIN, and obtain long distance calling time having a value up to the value of the card stored in the phone card database 204.

Each activation or recharge transaction is recorded by the system 108. At the end of the day, a report is preferably created for each card issuer and retail location so that their accounts can be reconciled. Transfer of funds between these parties may then take place by any commercially acceptable means.

II. Electronic Gift Certificate™ Card

The multifunction card system 108 of the present invention is also capable of providing an Electronic Gift Certificate™ (EGC) card 101 for a retail issuer. Such a card 101 could be sold by the retail issuer for making purchases only in the retail issuer's stores or for use in a plurality of stores. As in the phone card context, the customer would ask the sales clerk for an Electronic Gift Certificate™ card of the desired amount. If the customer already has an Electronic Gift Certificate™ card, he or she might ask the clerk to add the desired amount to the already existing balance. The clerk swipes the card 101 and enters the transaction amount, either directly or using a nominal amount and/or the PIN pad, depending upon whether the debit network 107 is to be used. Using one of the methods discussed above, the data then makes its way to the processing hub 103.

Alternatively, the activation could occur by processing the card 101 as a typical debit card using the debit network 107. In such a case, the retail issuer would maintain accounts with the sponsor bank. When an activation transaction takes place, the bank would transfer the activation amount from a general account to an account corresponding to the card. If the card is to be accepted at a number of retail locations, the account corresponding to the card could be opened in the name of the card holder if appropriate paperwork is submitted to the bank. In this manner, the card could be used at any retail location capable of processing debit transactions. This would allow the card to serve as a prepaid card

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substitute for travelers checks and money orders. Regardless of the way in which the card is processed, the transaction data eventually makes its way to the processing hub 103.

Upon receipt of the transaction data, the hub 103 recognizes the card 101 as being an Electronic Gift Certificate™ card of the retail issuer and activates or recharges the card 101 in the appropriate amount in an EGC database 205 maintained at the processing hub 103.

Optionally, the Electronic Gift Certificate™ card 101 could also be recharged using a credit card via an on-line connection to the processing hub 103, such as over the Internet.

Once a card 101 has been activated or recharged, the recipient of the card 101 is allowed to make purchases using the card. If the card is only for use in the retail issuer's stores, the purchase transaction might proceed in much the same manner as the activation process. The clerk would swipe the card 101 and enter the purchase amount. If the transaction is to be transmitted over the debit network, a nominal transaction amount may be used, and the actual amount entered instead of the PIN. A special code is used to indicate that the transaction is a purchase transaction rather than an activation or recharge transaction. If the debit network is used, the code could be the first digit of the PIN, followed by the purchase amount, thus allowing the software of the system 108 to recognize the type of transaction and decrypt the data accordingly.

Upon receipt of the data via one of the methods described above, the processing hub 103 compares the purchase amount to the balance for the card in the EGC database 205. If the balance is greater than the purchase amount, the processing hub 103 will decrement the record in the database and will send back an approval code which will allow the transaction to proceed. If a sufficient balance is not present, the processing hub 103 will notify the POS device 105 that the transaction may not proceed. Preferably, an automated toll free number is provided for the holder of the card 101 to verify the remaining balance. The processing hub 103 preferably maintains records of all transactions.

If the card 101 is for use in many retail locations, it would instead be processed during purchase transactions as a typical debit card, preferably using the debit network 107. In this case, either the retail issuer or the cardholder must have an account with the sponsor bank. When a purchase transaction takes place, the clerk or cardholder simply swipes the card and receives back a response in the same manner as a normal debit transaction. If sufficient funds are present in the account corresponding to the card, the transaction will be approved. The sponsor bank then transfers the purchase amount from the retail issuer's or cardholder's account to an account belonging to the retail location at which the purchase occurred, which account may or may not be located at the sponsor bank. The transaction data is then forwarded to the processing hub 103 so that the EGC database 205 can be updated.

In a preferred embodiment, an Electronic Gift Certificate™ card could also be used to obtain long distance calling time in addition to making purchases in the retail issuer's store. The retail issuer could contract with a prepaid phone card issuer to provide the calling time. When the card 101 is activated, the phone card issuer simultaneously creates an entry in its phone card database 204 corresponding to the entry in the EGC database 205. The card 101 can then be used in exactly the same manner as the prepaid phone card discussed above. In order to prevent the use of the Electronic Gift Certificate™ card simultaneously to make purchases and to obtain long distance calling time, a safety procedure

is provided. When the card **101** is used to make a long distance call, the phone card issuer hub **104** instructs the processing hub **103** to seize the record corresponding to the card **101** in the EGC database **205**. With the record seized, the system **108** will not authorize any purchasing activity for the duration of the call. When the call terminates, the phone card issuer hub **104** decrements the appropriate record in its phone card database **204** and instructs the processing hub **103** to do the same in the EGC database **205**. The record in the EGC database **205** is then unseized. When the card **101** is used to make a purchase, the processing hub **103** similarly instructs the phone card issuer hub **104** to seize the appropriate record in the phone card database **204** for the duration of the transaction. When the transaction is over, the records in the EGC database **205** and the phone card database **204** are decremented appropriately.

In the preferred embodiment of the invention, the retail issuer is also given the capability to award loyalty points to the bearer of the Electronic Gift Certificate™ card in recognition of purchases or recharges made. In such a case, the processing hub **103** maintains a separate loyalty card database **206**. When the Electronic Gift Certificate™ card bearer adds money to the card **101**, or makes a purchase using the card **101**, the system **108** may add a number of points proportional to the purchase price to the card's record in the loyalty card database **206**. Alternatively points could be awarded based upon the frequency of card usage rather than purchase amounts. In either case, when the card bearer reaches certain predefined point plateaus, he or she may be rewarded by the retail issuer with additional card value or with long-distance calling time.

III. Loyalty Card

Not unlike the loyalty feature add-on of the Electronic Gift Certificate™ card, the system **108** of the present invention may provide a separate loyalty card much like a frequent flier card that can have points added at virtually any POS device **105**.

A. Product/Manufacturer-Specific Loyalty Card

The card could be issued by a certain manufacturer to reward a customer with loyalty points for purchasing the manufacturer's product, regardless of the retail location of the purchase. This reward could be tied to the purchase of a single product type or to all of the manufacturer's products. The loyalty points awarded could be varied based upon any promotional campaigns being conducted by the manufacturer. Points are added to the card at participating retail locations which sell the manufacturer's product(s). The card **101** is swiped at any retail location, the purchase amount for the manufacturer's product is entered using the PIN pad of the POS device **105**, and the data is transmitted to the processing hub **103** using one of the methods described above. After receiving the data, the processing hub **103** credits the appropriate record in the loyalty card database **206** with a number of points proportional to the purchase price. The card is transportable to any participating retailer. The system **108** allows the manufacturer to connect to the processing hub **103** via an on-line connection to access the loyalty card database **206**. Again, the customer could be rewarded when certain point plateaus are reached.

B. Retailer-Specific Loyalty Card

Alternatively, the card could be issued by a particular retailer to reward customers for purchases made in the retailer's location(s). The retailer could award points for any purchase within the store, or could target special promotional items. The card would function in a manner similar to the product-specific card. Once again, the customer is rewarded when certain point plateaus are reached.

Alternatively, the loyalty data could be used to simultaneously credit other databases of the system **108**. For instance, instead of awarding loyalty points, the system could add value in real time to a record in the phone database **204** at the prepaid phone card issuer hub **104**, thus rewarding the customer with free phone time. Loyalty points might also be converted into a dollar value for use at the retail location. Optionally, the system **108** can keep records of a consumer's purchasing habits for marketing purposes. As with the manufacturer-specific card, the system **108** allows the retailer to connect to the processing hub **103** via an on-line connection to access the loyalty card database **206**.

IV. Information Retrieval Card

Finally, the multifunction card system **108** of the present invention is capable of providing an information retrieval card. In an exemplary embodiment, a medical information card which allows access and retrieval of a patient's complete medical history from a multitude of remote locations is provided. Each participating patient's medical information is stored in a record in a medical information database **207** maintained at the processing hub **103**. The record contains the identification number encoded on the patient's card **101**.

When medical history information data is needed, it may be requested by swiping the card **101** through a POS device **105** at a participating doctor's office or hospital. Preferably, a PIN is entered into the POS device **105** to ensure that only an authorized person is able to request the information. The POS device **105** would then send the request to the processing hub **103** via one of the routes described above. When the processing hub **103** receives the request from the authorized requestor, it then immediately sends the information to the requestor via means preselected by the participating doctor's office or hospital. Such means may include electronic mail, facsimile, voice response, and other similar means. The medical history information may be updated by the patient or his or her doctor or insurer by forwarding new information to the operator of the system **108** via an on-line connection, over the Internet, by telephone, by facsimile, or by mail.

As a backup, the request could instead be made using a computer, wherein the computer connects to the processing hub **103** via the Internet or by direct modem connection. The requester might be allowed to view, print, or download the appropriate medical history information. Alternatively, the request could be made by facsimile or by calling an automated toll free number and entering the card number.

In order to allow a cardholder to keep track of medical savings accounts or various other means for paying for medical services (e.g., Medicare), the system **108** also allows access to a database which maintains the medical funds for the cardholder. As described above under the Electronic Gift Certificate™ section, the system **108** is able to authorize, reject, and cause money to be transferred based upon the cardholder's available medical funds.

V. Intelligent Card™

In the preferred embodiment of the invention, the multifunction card system **108** is capable of providing a single card **101** which is capable of performing all of the foregoing functions. Preferably, the system **108** also allows for the card **101** to be used as an on-line debit card after the cardholder registers with the system. In order to let the system **108** know which function or functions the card **101** is serving in any particular transaction, a code is entered into the PIN pad of the POS device from which the transaction is originating. Alternatively, the system **108** could prompt the user to indicate the proper card function and the databases that must be accessed. Based upon this input, the system **108** carries

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out the appropriate actions. The system **108** can access each of the databases discussed above and can simultaneously increase or decrease each database as needed by the type of transaction occurring.

VI. Processing Hub Technical Details

The processing hub **103** of the present invention provides front-end POS device management and message processing for card authorization and activations. The processing hub **103** can be implemented using any computer having acceptable processing and storage capacity. It preferably comprises a Stratus RADIO Cluster™, which is a scaleable system based upon the standard Intel Pentium processor. The Stratus RADIO Cluster™ provides the processing hub **103** with a high degree of reliability and fault-tolerance. Since the Stratus system is scaleable, an adequate degree of redundancy can be provided in order to reduce the impact of individual failures. In addition, as demand for the multifunction card system increases, the processing hub **103** can be scaled to meet increasing demands for processing power and storage availability. The modular design of such a hub is upgradable for long term capacity planning and expansion.

The software of the system is preferably written in the C, Force, and Foxpro programming languages. The C language programs are preferably written to interface with specialty external interface boards. Force is preferably used for all on-line transaction processing, while Foxpro preferably provides for database management and the user interface. Since Force and Foxpro share database file structures, on-line transactions may be viewed by the system operators using the Foxpro interface.

In order to provide further reliability, all applications and data are replicated and synchronized across the processing hub **103** by Isis Reliable software. Load distribution among the modules is automatically controlled by the software to improve the response time and throughput. External communications nodes provide the necessary interface requirements of physical connectivity, protocol, message transmission, message validation, and message processing.

While the multifunction card system herein described constitutes the preferred embodiment of the present invention, it is to be understood that the invention is not limited to this precise form of system, and that changes may be made therein without departing from the scope of the invention which is defined in the following claims.

I claim:

1. A multifunction card system, comprising:

- a. at least one electronic gift certificate card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said multifunction card system;
- b. a bank processing hub computer under bank hub software control and in communication over a banking network with a pre-existing standard retail point-of-sale device, said bank processing hub computer receiving electronic gift certificate card activation data when said electronic gift certificate card is swiped through said point-of-sale device, said electronic gift certificate card activation data comprising said unique identification number of said electronic gift certificate card and an electronic gift certificate activation amount; and
- c. a gift certificate card computer under gift certificate card software control and in communication with said bank processing hub for activating a gift certificate card

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account in a gift certificate card database corresponding to said electronic gift certificate card, said gift certificate card account comprising balance data representative of an electronic gift certificate activation amount.

5. 2. A multifunction card system as recited in claim 1 wherein said bank processing hub computer receives electronic gift certificate card recharge data from said pre-existing standard retail point-of-sale device when said electronic gift certificate card is swiped through said point-of-sale device, said electronic gift certificate card recharge data comprising said unique identification number of said electronic gift certificate card and an electronic gift certificate recharge amount, and said gift certificate card computer being capable of increasing said balance data of said gift certificate card account corresponding to said electronic gift certificate card by said electronic gift certificate recharge amount.

10. 3. A multifunction card system as recited in claim 1, wherein a first digit of said bank identification number is selected from a group of numbers consisting of the numbers four and five.

15. 4. A multifunction card system as recited in claim 1, wherein said gift certificate card computer communicates with a phone card computer so as to allow a user of said electronic gift certificate card to obtain long distance telephone calling services with said card, such that a total value of goods and services purchased and long distance telephone calling services obtained cannot exceed said balance data of said gift certificate card account corresponding to said electronic gift certificate card.

20. 5. A multifunction card system as recited in claim 4, further comprising loyalty data associated with said electronic gift certificate card based upon usage of said electronic gift certificate card.

25. 6. A multifunction card system as recited in claim 1, further comprising loyalty data associated with said electronic gift certificate card based upon usage of said electronic gift certificate card.

30. 7. A multifunction card system as recited in claim 1, further comprising:

- 40. a. at least one phone card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said multifunction card system;
 - b. a bank processing hub computer under bank hub software control and in communication over a credit and debit card network with a pre-existing standard retail point-of-sale device capable of processing credit and debit card transactions, said bank processing hub computer receiving phone card activation data when said phone card is swiped through said point-of-sale device, said phone card activation data comprising said unique identification number of said phone card and a phone card activation amount; and
 - c. a phone card computer under phone card software control and in communication with said bank processing hub for activating a phone card account in a phone card database corresponding to said phone card, said phone card account comprising balance data representative of a phone card activation amount.
45. 8. A multifunction card system as recited in claim 7, wherein said bank processing hub computer receives phone card recharge data from said pre-existing standard retail point-of-sale device when said phone card is swiped through said point-of-sale device, said phone card recharge data

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comprising said unique identification number of said phone card and a phone card recharge amount, said phone card computer being capable of increasing said balance data of said phone card account corresponding to said phone card by said phone card recharge amount.

9. A multifunction card system as recited in claim 7, wherein a single card with a single identification number can function as an electronic gift certificate card and as a phone card.

10. A multifunction card system as recited in claim 1, further comprising:

at least one loyalty card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said multifunction card system, said bank processing hub computer under bank hub software control and in communication over a banking network with a pre-existing standard retail point-of-sale device for receiving loyalty data when said loyalty card is swiped through said point-of-sale device, said loyalty data comprising said unique identification number of said loyalty card and of purchase data representing the goods and services purchase amount; and

a loyalty card computer under loyalty card software control and in communication with said bank processing hub for crediting a loyalty card account in a loyalty card database corresponding to said loyalty card with loyalty points based upon said purchase data.

11. A multifunction card system as recited in claim 10, wherein a single card with a single identification number can function as an electronic gift certificate card and as a loyalty card.

12. A multifunction card system as recited in claim 1, further comprising:

a. at least one medical information card having a unique identification number associated with it, said medical information card belonging to a patient;

b. a medical database comprising at least one record corresponding to said medical information card, said record containing medical history information about said patient; and

c. a medical card computer under medical card software control and in communication with said bank processing hub for allowing an authorized requestor to obtain said medical history information about said patient using said unique identification number associated with said medical information card.

13. A multifunction card system as recited in claim 12, wherein a single card with a single identification number can function as an electronic gift certificate card and as a medical information card.

14. A prepaid phone card system, comprising:

a. at least one phone card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said prepaid phone card system;

b. a bank processing hub computer under bank hub software control and in communication over a banking network with a pre-existing standard retail point-of-sale device for receiving phone card activation data when said phone card is swiped through said point-of-sale device, said phone card activation data comprising

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said unique identification number of said phone card and a phone card activation amount; and

c. a phone card computer under phone card software control and in communication with said bank processing hub for activating a phone card account in a phone card database corresponding to said phone card, said phone card account comprising balance data representative of a phone card activation amount.

15. A prepaid phone card system as recited in claim 14, wherein said bank processing hub computer receives phone card recharge data from said pre-existing standard retail point-of-sale device when said phone card is swiped through said point-of-sale device, said phone card recharge data comprising said unique identification number of said phone card and a phone card recharge amount, and said phone card computer increasing said balance data of said phone card account corresponding to said phone card by said phone card recharge amount.

16. A prepaid phone card system as recited in claim 14, wherein a first digit of said bank identification number is selected from a group of numbers consisting of the numbers four and five.

17. A loyalty card system, comprising:

a. at least one loyalty card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to said loyalty card system;

b. a bank processing hub computer under bank hub software control and in communication over a banking network with a pre-existing standard retail point-of-sale device for receiving loyalty data when said loyalty card is swiped through said point-of-sale device, said loyalty data comprising said unique identification number of said card and purchase data; and

c. a loyalty card computer under loyalty card software control and in communication with said bank processing hub for crediting a loyalty card account in a loyalty card database corresponding to said loyalty card with loyalty points based upon said purchase data.

18. A loyalty card system as recited in claim 17, wherein a first digit of said bank identification number is selected from a group of numbers consisting of the numbers four and five.

19. A method of activating or recharging a magnetically encoded electronic gift certificate card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to an electronic gift certificate card system, comprising the steps of:

a. swiping said gift certificate card through a pre-existing standard retail point-of-sale device;

b. entering an activation amount into said point-of-sale device;

c. transmitting said identification number and said activation amount from said point-of-sale device to a bank processing hub computer over a banking network via which said point-of-sale device processes debit and credit card transactions;

d. decrypting said identification number and said amount by a gift certificate card computer under gift certificate card software control and in communication with said bank processing hub computer if said identification number and said activation amount are encrypted; and

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- e. crediting a gift certificate card account balance, in a gift certificate card database existing on said gift certificate card computer, with said activation amount.
- 20.** A method according to claim **19**, further comprising the step of allowing a user of said gift certificate card to obtain long distance telephone calling time using said gift certificate card.
- 21.** A method according to claim **19**, further comprising the step of associating loyalty data with said gift certificate card based upon usage of said gift certificate card.
- 22.** A method according to claim **20**, further comprising the step of transferring loyalty data to a manufacturer or retailer.
- 23.** A method of making purchases using a magnetically encoded electronic gift certificate card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to an electronic gift certificate card system, comprising the steps of:
 - a. swiping said gift certificate card through said pre-existing standard retail point-of-sale device and entering a purchase amount in order to allow a user of said gift certificate card to purchase goods and services using said gift certificate card;
 - b. transmitting said identification number and said purchase amount to said bank processing hub computer;
 - c. comparing of said purchasing amount to said gift certificate card account balance by a gift certificate card computer;
 - d. transmitting a rejection code to said point-of-sale device if said purchase amount is more than said gift certificate card account balance;
 - e. transmitting an approval code to said point-of-sale device in order to approve said user's purchase of said goods and services if said purchase amount is less than or equal to gift certificate card account balance;
 - f. decrementing said gift certificate card account balance by said purchase amount; and
 - g. incrementing a seller account belonging to a seller of said goods and services by said purchase amount, wherein said total value of goods and services purchased and long distance telephone calling time obtained using said gift certificate card cannot exceed said gift certificate card account balance.
- 24.** A method according to claim **23**, further comprising the step of decrypting said identification number and said purchase amount by said gift certificate card computer under gift certificate card software control and in communication with said bank processing hub computer if said identification number and said purchase amount are encrypted.
- 25.** A method according to claim **23**, further comprising the step of associating loyalty data with said gift certificate card based on said purchase amount.
- 26.** A method of activating or recharging a phone card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to a phone card system, comprising the steps of:
 - a. swiping said phone card through a pre-existing standard retail point-of-sale device;
 - b. entering an activation amount into said point-of-sale device;
 - c. transmitting said identification number and said activation amount from said point-of-sale device to a bank

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- processing hub computer over a banking network in which said point-of-sale device processes debit and credit card transactions;
- d. decrypting said identification number and said activation amount by a phone card computer under phone card software control and in communication with said bank processing hub computer if said identification number and said activation amount are encrypted;
- e. crediting a phone card account balance with said activation amount, said phone card account balance being maintained in a phone card database in communication with said phone card software;
- f. transmitting an authorization number to said point-of-sale device from said bank processing computer hub allows said user to use said phone card to make phone calls;
- g. allowing a user of said phone card to obtain long distance telephone calling time having a value up to said phone card account balance; and
- h. reconciling a retailer account belonging to a retailer of said phone card with a phone card issuer account belonging to an issuer of said phone card.
- 27.** A method of adding points to a loyalty card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by the American Banking Association for use in a banking network, said identification number corresponding to a loyalty card system, comprising the steps of:
 - a. swiping said loyalty card through a pre-existing standard retail point-of-sale device;
 - b. entering a purchase amount of a company's product into said point-of-sale device;
 - c. transmitting said identification number and said purchase amount from said point-of-sale device to a bank processing hub computer;
 - d. decrypting said identification number and said purchase amount by a loyalty card computer under loyalty card software control and in communication with said bank processing hub computer if said identification number and said purchase amount are encrypted; and
 - e. crediting a loyalty card account balance in a loyalty card database with a number of said points proportional to said purchase amount.
- 28.** A method according to claim **27**, wherein said company is a manufacturer.
- 29.** A method according to claim **27**, wherein said company is a retailer.
- 30.** A method according to claim **27**, further comprising the step of allowing an owner of said loyalty card to redeem loyalty points for an item selected from said group consisting of goods, services, discounts on goods and services, long distance telephone calling time value, and money value.
- 31.** A method of retrieving information using an information retrieval card having a unique identification number encoded on it, said identification number comprising a bank identification number approved by said American Banking Association for use in a banking network, said identification number corresponding to an information retrieval card system, comprising said steps of:
 - a. swiping said information retrieval card through a pre-existing standard retail point-of-sale device;

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- b. transmitting said identification number and said a Personal Identification Number (PIN) indicative of a user's identity from said point-of-sale device to a bank processing hub computer over a banking network in which said point-of-sale device processes debit and credit card transactions;
- c. decrypting said identification number and said PIN by an information retrieval card computer under information retrieval card software control and in communication with said bank processing hub computer if said identification number and said PIN are encrypted;
- d. transmitting a rejection code to said point-of-sale device if said PIN entered does not correspond to said identification number; and

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- e. transmitting said information to a preselected information receiving device in order to receive said information.

32. A method according to claim 31, further comprising said step of entering said PIN (Personal Identification Number) into said point-of-sale device.

33. A method according to claim 31, wherein said information comprises medical history information.

34. A method according to claim 31, wherein said unique identification number further comprises a medical identification number.

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(54) MULTIFUNCTION CARD SYSTEM(75) Inventor: **Robert E. Dorf**, Raleigh, NC (US)(73) Assignee: **JPMorgan Chase Bank**, Houston, TX
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Related U.S. Application Data

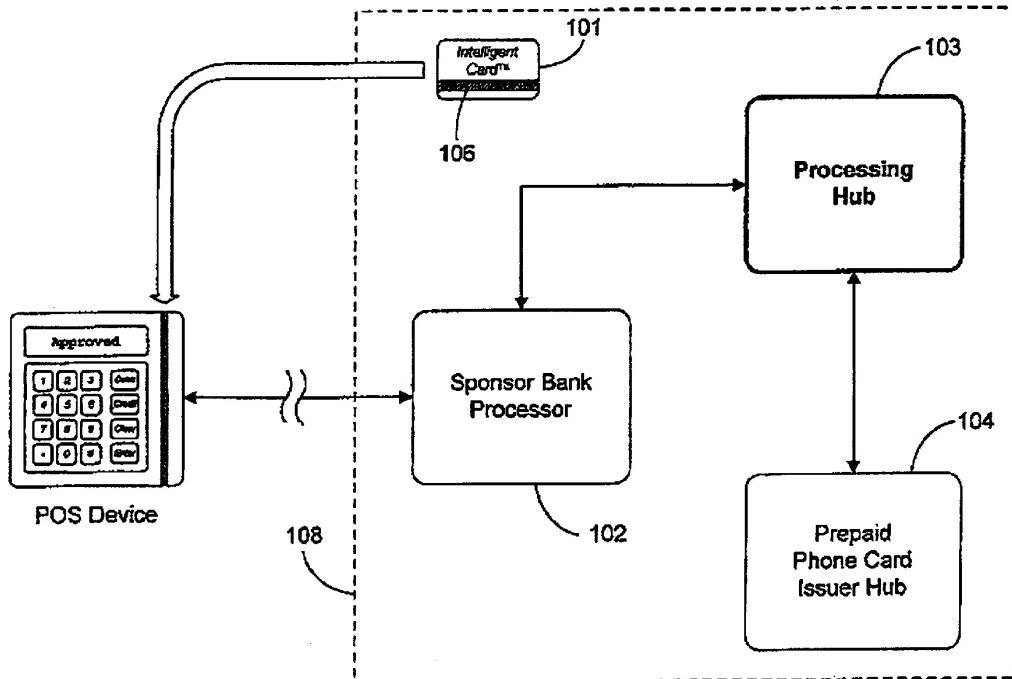
(63) Continuation of application No. 08/891,261, filed on Jul. 10, 1997, now Pat. No. 6,000,608.

(51) **Int. Cl.**
G07F 7/08 (2006.01)
G07F 7/10 (2006.01)(52) **U.S. Cl.** 235/380; 235/282; 235/493(58) **Field of Classification Search** 235/380
See application file for complete search history.**(56) References Cited**

To view the complete listing of prior art documents cited during the proceeding for Reexamination Control Number 90/009,789, please refer to the USPTO's public Patent Application Information Retrieval (PAIR) system under the Display References tab.

Primary Examiner—John M Hotaling, II**(57) ABSTRACT**

Disclosed is a multifunction card system which provides a multifunction card capable of serving as a prepaid phone card, a debit card, a loyalty card, and a medical information card. Each card has an identification number comprising a bank identification number which assists in establishing communications links. The card system can be accessed from any existing point-of-sale (POS) device. The POS device treats the card as a credit or debit card and routes transaction data to a processing hub using the banking system. The processing hub coordinates the various data-bases corresponding to the various functions of the card.



US 6,189,787 C1

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**EX PARTE
REEXAMINATION CERTIFICATE
ISSUED UNDER 35 U.S.C. 307**

THE PATENT IS HEREBY AMENDED AS
INDICATED BELOW.

2

AS A RESULT OF REEXAMINATION, IT HAS BEEN
DETERMINED THAT:

The patentability of claims **1-4, 7-9, 14-16, 19, 20** and **26**
is confirmed.

⁵ Claims **23** and **24** are cancelled.

Claims **5, 6, 10-13, 17, 18, 21, 22, 25** and **27-34** were not
reexamined.

* * * * *

CERTIFICATE OF SERVICE

I hereby certify that on September 12, 2014, I served two copies of the
BRIEF OF DEFENDANTS-APPELLANTS The Gap, Inc. and Direct Consumer
Services, LLC by electronic mail to counsel of record listed below:

Thomas H. Watkins
Husch Blackwell LLP – Austin
111 Congress Avenue
Suite 1400
Austin, TX 78701-4093
Direct: 512-703-5752
Fax: 514-479-1101
tom.watkins@huschblackwell.com

Philip D. Segrest, Jr.
Husch Blackwell LLP
120 S. Riverside Plaza, Suite 2200
Chicago, IL 60606
Direct: 312-655-1500
Fax: 312-655-1501
philip.segrest@huschblackwell.com

September 12, 2014

/s/ Alan M. Fisch
Alan M. Fisch

CERTIFICATE OF COMPLIANCE

Pursuant to Federal Rule of Appellate Procedure 32(a)(7)(c), the undersigned certifies that this brief complies with the applicable type-volume limitations.

Exclusive of the portions exempted by the Federal Rule of Appellate Procedure 32(a)(7)(B)(iii) and Circuit Rule 32(b), this brief contains 10,770 words. This certificate was prepared in reliance on the word count of the word processing system Microsoft Word 2010 used to prepare this brief.

This brief further complies with the typeface requirements of Federal Rule of Appellate Procedure 32(a)(5) and the type style requirements of Federal Rule of Appellate Procedure 32(a)(6). This brief has been prepared in a proportionally spaced typeface using Microsoft Word Version 2010 in 14 point Times New Roman font.

/s/ Alan M. Fisch
Alan M. Fisch